WVU SCHOOL OF PUBLIC HEALTH

Preliminary Self-Study Report

Prepared for the Council on Education for Public Health

April 2020

Final for Preliminary – November 2020

Contents

Abbreviations and Acronyms

A	ABCRMS	Annual Biomedical Research Conference for Minority Students
	ACT	American College Test
	ADUGS	Assistant Dean for Undergraduate Studies
	ADVANCE	Advancement of Women in Academic Science and Engineering Careers
	ALC	Alumni Leadership Council
	AMIF	Animal Models and Imaging Facility
	AMOS	Statistical Software – Analysis of a Moment Structures
	AOE	Area of Emphasis
	APHA	American Public Health Association
	ASPPH	Association of Schools and Programs of Public Health
	AY	Academic Year
B	BA	Bachelor of Arts
	BIOS	Department of Biostatistics
	BMC	BioMed Central
	BMI	Body Mass Index
	BOG	Board of Governors
	BS	Bachelor of Science
	BSPH	Bachelor of Science in Public Health
C	CAHME	Commission on Accreditation of Healthcare Management Education
	CAI	Center for Advanced Imaging
	CARDIAC	Coronary Artery Risk Detection in Appalachian Communities
	CDC	Center for Disease Control and Prevention
	CEPH	Council on Education for Public Health
	CIM	Course Inventory Management
	CRDEB	Clinical Research Design, Epidemiology, and Biostatistics
	CS&L	Center for Service and Learning
	CTR	Clinical and Translational Research
	CTRU	Clinical Trials Research Unit
	CTSA	Clinical and Translations Science Award
	CV	Curriculum Vitae
D	DEI	Diversity, Equity and Inclusion
	DHHR	West Virginia Department of Health and Human Resources
	DI	Diversity and Inclusion
E	EPID	Department of Epidemiology
	ERF	Electronic Resource File
	ESC	Experimental Stroke Care

F	FCSCCF	Flow Cytometry and Single Cell Core Facility
	FPLC	Fast Protein Liquid Chromatography
	FTE	Full Time Equivalents
	FWA	Federal Wide Assurance
G	GEF	General Education Foundation
	GPA	Grade Point Average
	GRE	Graduate Record Exam
	GTA	Graduate Teaching Assistant
H	HIPAA	Health Insurance Portability and Accountability Act
	HLC	Higher Learning Commission
	HPC	High Performance Computing Facility
	HPLC	High Performance Liquid Chromatography
	HPML	Department of Health Policy, Management and Leadership
	HSC	Robert C Byrd Health Sciences Center
	HSL	Health Sciences Library
	HSR	Health Research Center
	HSTA	Health Sciences and Technology Academy
I	iBT	Internet-Based TOEFL
	ICRC	Injury Control Research Center
	IDeA	Institutional Development Award
	ILE	Integrated Learning Experience
	IMMR	In vivo Multifunctional Magnetic Resonance Center
	IO	Institutional Official
	IPEDS	Integrated Postsecondary Education Data System
	IRB	Institutional Review Board
	IT	Information Technology
	ITS	Information Technology Services
J	JMP	Statistical Software – originally stood for "John's Macintosh Project"
K	kc	Kuali Coeus (electronic research administration application)
L	LDH	Local Health Department
	LGBTQ	Lesbian, Gay, Bisexual, Transgender, and Queer (or Questioning)
M	MD/MPH	Medical Doctor and Master of Public Health
	MDTV	Mountaineer Doctor Television
	MOU	Memorandum of Understanding
	MPH	Master of Public Health
	MS	Master of Science

N	NACCHO	National Association of City and County Health Officials
	NGO	Non-governmental Organization
	NHANES	National Health and Nutrition Examination Survey
	NIH	National Institutes of Health
	NIOSH	National Institute for Occupational Safety and Health
	NSO	New Student Orientation
O	OEHS	Department of Occupational and Environmental Health Sciences
	OHSR	Office of Health Services Research
	OSP	Office of Sponsored Programs
P	PA	Pennsylvania
	PhD	Doctor of Philosophy
	PI	Principle Investigator
	PIF	Primary Instructional Faculty
	PRC	Prevention Research Center
	Project	Integrated Community Engagement
	PTMCF	Preclinical Tumor Models Core Facility
	PUBH	Public Health subject code
R	R	statistical program language
	RBC	Rodent Behavior Core Facility
	RC	Research Computing
S	SACNAS	Society for Advancement of Chicanos/Hispanics and Native Americans in Science
	SAPH	Student Association of Public Health
	SAS	Statistical Analysis System
	SAT	Scholastic Aptitude Test
	SBHS	Department of Social and Behavioral Sciences
	SMART	Specific, Measurable, Attainable, Relevant, and Time-bound
	SOLE	Study Observe Learn Engage
	SOPHAS	Schools of Public Health Application Service
	SPA	Sponsored Projects and Property Accounting
	SPH	School of Public Health
	SPHLC	School of Public Health Leadership Council
	SPSS	Statistical Package for the Social Sciences
	SQL	Structured Query Language
	SURE	Summer Undergraduate Research Experience
	SWPA	South West Pennsylvania
T	TACF	Transgenic Animal Core Animal Facility
	TESS	Transfer Equivalency Self Service
	TIPH	This is Public Health
	TOEFL	Test of English as a Foreign Language

U	UG	Undergraduate
	UPC	University Planning Committee
	US	United States
W	WHO	World Health Organization
	WV	West Virginia
	WV CTSI	West Virginia Clinical and Translational Science Institute
	WVPHA	West Virginia Public Health Association
	WVRHA	West Virginia Rural Health Association
	WVU	West Virginia University
	WVIRC	West Virginia University Research Corporation
	WVSMA	West Virginia State Medical Association
	WVPBRN	West Virginia Practice-Based Research Network.

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.)

Founded in 1867, West Virginia University (WVU) is West Virginia's flagship, land-grant university.

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)

WVU has 14 schools and colleges across three campuses in Morgantown, Beckley, and Keyser, West Virginia. WVU offers 169 undergraduate degrees, 138 master's degrees, 42 doctoral degrees, and 10 professional doctorate degrees.

c. number of university faculty, staff and students

Faculty and Staff: The 2016-17 Integrated Postsecondary Education Data System (IPEDS) Human Resources reports show that WVU has 2,142 full-time instructional staff, 6,187 full-time non-instructional staff, 941 part-time staff and 1,629 graduate assistants. The 2015-16 IPEDS Fall Enrollment reports list the student-to-faculty ratio of each campus as follows: • WVU Morgantown – 19:1 • WVU Keyser – 21:1 • WVU Beckley – 11:1 Seventy-three percent of WVU's instructional faculty in non-Health Sciences disciplines are either tenured or tenure-track. This percentage does not vary significantly among the campuses. The majority of the instructional faculty in the Health Sciences disciplines, 82.7%, are clinical track.

Students: Fall 2017 enrollment included 22,504 undergraduates and 5,905 graduate and professional students. Total enrollment at WVU Morgantown has been stable over the past decade. The majority of the students enrolled are full-time undergraduate degree-seeking students of traditional college-going age.

d. brief statement of distinguishing university facts and characteristics

WVU offers a wide range of high-quality academic programs at the associate, undergraduate, graduate and professional levels that are consistent with its land-grant mission and the five goals outlined in the University's 2020 strategic plan, which include:

- Engage undergraduate, graduate, and professional students in a challenging academic environment
- Excel in research, creative activity, and innovation in all disciplines.
- Foster diversity and an inclusive culture.
- Advance international activity and global engagement.
- Enhance the well-being and the quality of life of the people of West Virginia.

WVU's academic degree programs are outlined in the Undergraduate and Graduate/Professional Catalogs, posted on the institution's website, and reported annually to the West Virginia Higher Education Policy Commission and to the Department of Education (DOE).

WVU's commitment to advancing research is reflected in its Carnegie Basic Classification, which underscores WVU's position as the only R1 doctoral institution in West Virginia. This profile demonstrates WVU's evolution from a regional undergraduate teaching institution to a research university. In FY 2019, faculty conducted $181.4 million in sponsored contracts and research grants. This represents a 24 percent increase from the previous year ($146.5 million) and a steady climb since 2015, with $133.3 million reported that year.

WVU is a family of distinctive campuses united by a single mission: to provide a quality and affordable education. WVU's two largest regional campuses, WVU Keyser and WVU Beckley, are key to fulfilling the institution's land-grant mission of service to the state. WVU Keyser, which has an open admission policy for West Virginia residents, offers numerous AA degrees that allow students to change campuses and complete a baccalaureate degree in Morgantown; AAS degrees that prepare students to enter the workforce upon completion; four BAS degrees; and a 1 plus 3 BSN in conjunction with the WVU Morgantown School of Nursing. WVU Beckley's vision is to become a STEM and career-oriented teaching institution that supports building economically viable industries in a state where traditional extractive industry activity is waning. WVU Beckley's engineering programs are ranked among the top 100 undergraduate engineering programs by U.S. News & World Report, among other rankings.

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

WVU has 194 programs accredited by specialized accrediting bodies. Please see the Introduction Section of the electronic resource file (ERF) for the list of programs accredited by specialized accrediting bodies.

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 WVU School of Public Health. On September 28, 2012, the WVU Board of Governors approved the establishment of the School of Public Health (SPH) as an independent school within the Health Sciences Center. This new school, the first established at WVU in over 50 years, is viewed as an essential initiative to help achieve the University's strategic goal to "enhance the well-being and the quality of life for the people of West Virginia."

Establishment of the SPH was a watershed moment due, in large part, to the leadership of Christopher C. Colenda, MD, MPH, who was appointed Chancellor of the WVU HSC in November 2009. In addition to the allocation of significant institutional resources, Chancellor Colenda helped secure additional support from the West Virginia Higher Education Policy Commission, the Claude Worthington Benedum Foundation, and a five-year appropriation commitment of $1 million per year from the State of West Virginia. These resources have allowed the School to achieve

significant growth during a period characterized by increasing fiscal constraint. Additionally, senior faculty lines, committed to Dean Coben, allowed continued growth over the last five years.

Although the WVU SPH was founded in 2012, public health education is not new to the University. The School is building upon a strong foundation of faculty and programs. Our CEPH-accredited MPH program has been in place since 1997. Our students have achieved success in professional placements, and we have a dynamic interdisciplinary research enterprise. The faculty has performed nationally recognized work in competitive, externally funded centers. We are the only CEPH-accredited school in the country with CDC's National Institute for Occupational Safety and Health (NIOSH) on its campus. Our CDC-supported Prevention Research Center was funded in 2019 for an additional 5-years.

Working together, and with the involvement and input from faculty, staff, students, external stakeholders and consultants, an intensive self-study process was undertaken. This historical process revealed a number of key findings that provided the basis for development under the leadership of our current Dean, Dr. Jeffrey H. Coben, the Senior Associate Dean for Academic, Faculty, and Student Affairs, Dr. Linda A. Alexander, and the Senior Associate Dean for Administration, Dr. Sarah Woodrum.

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

(Intro Figure 1 – page 4)

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

(Intro Figure 2 – page 5)

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)

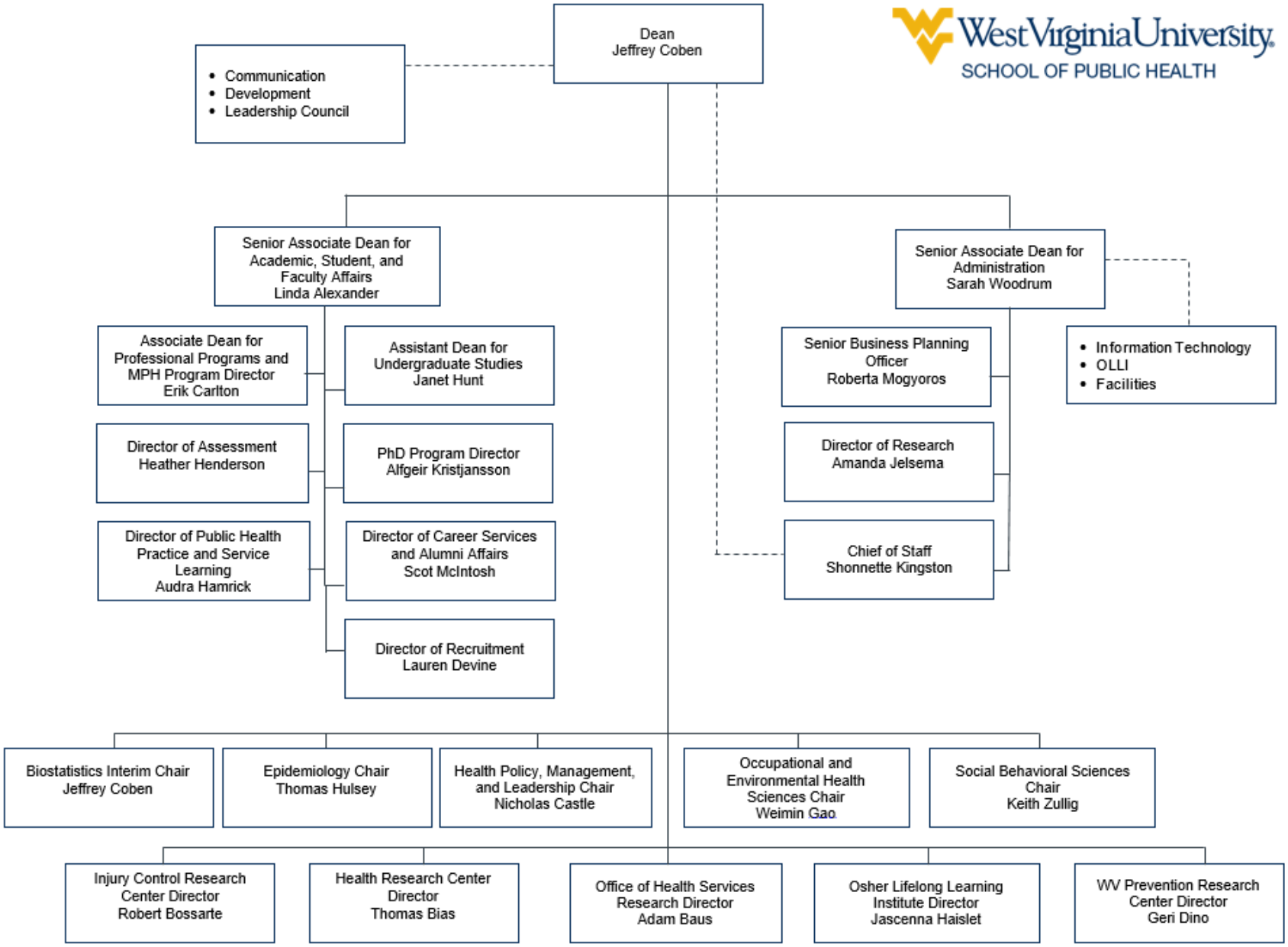
(Intro Figure 3 and Intro Figure 4 – pages 6 – 8)

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

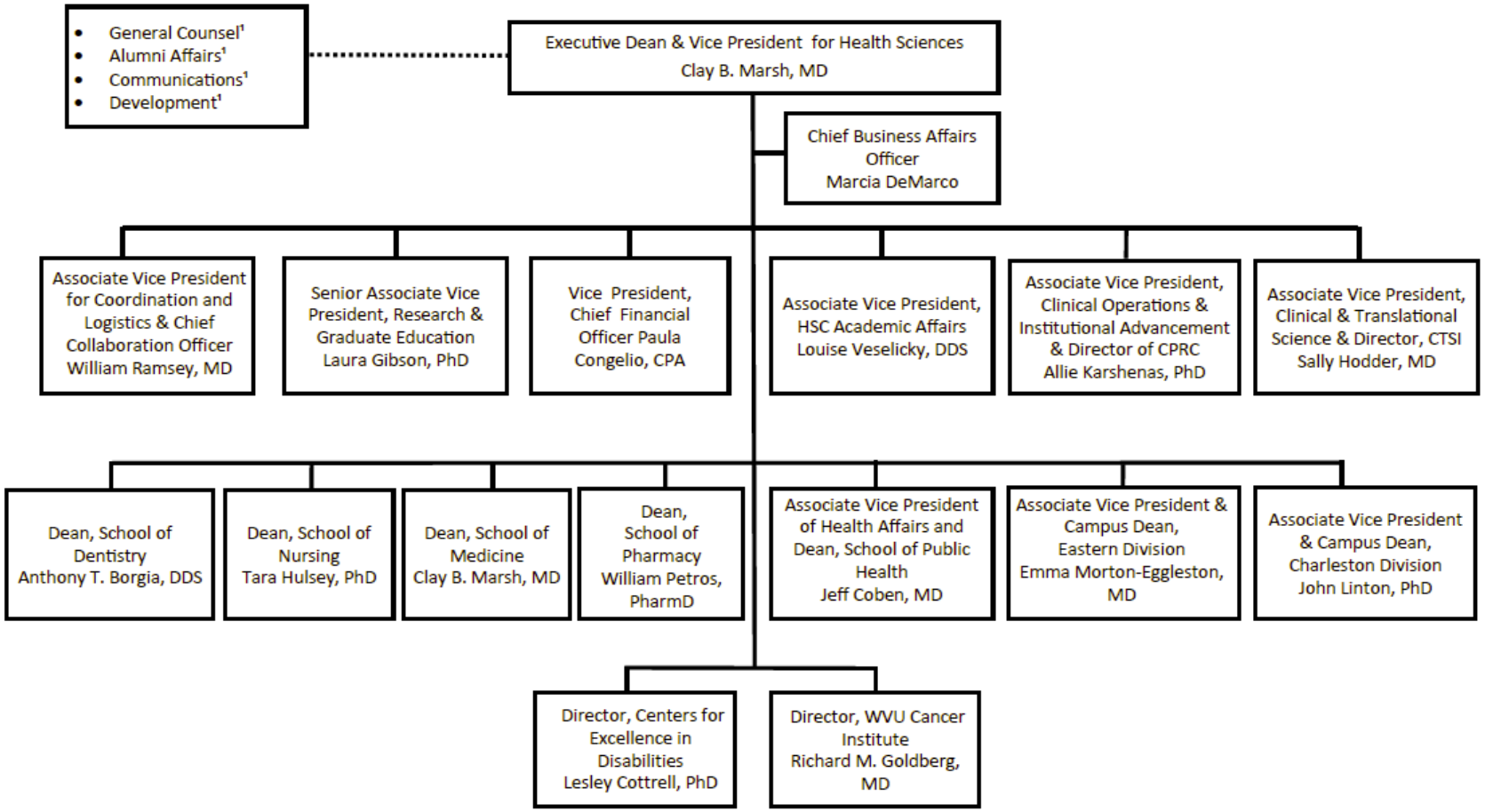
N/A

Please see the Introduction Section of the ERF for the organizational charts for Intro-2a, 2b, and 2c.

Intro Figure 1: SPH Organizational Chart

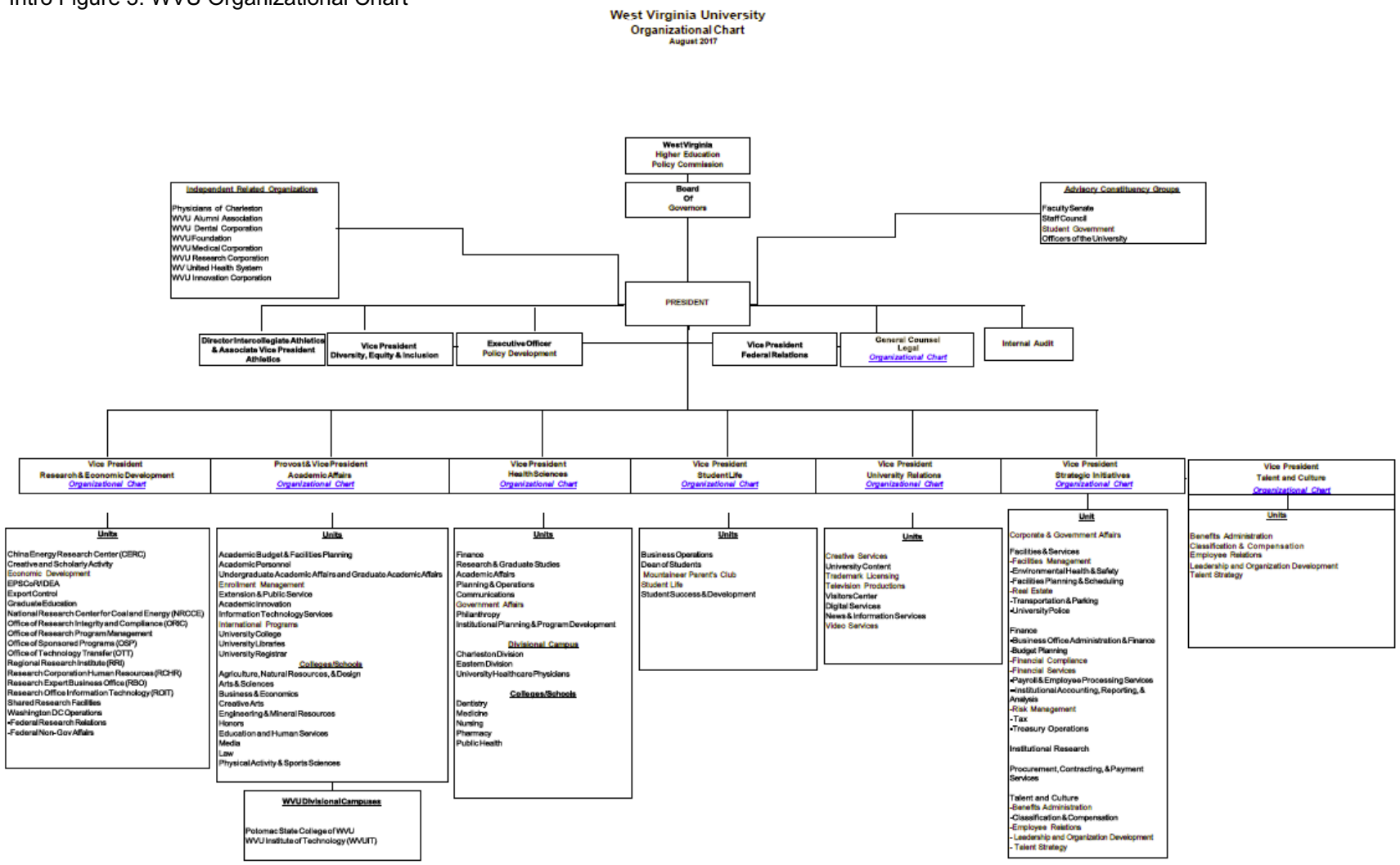


Intro Figure 2: HSC Organizational Chart

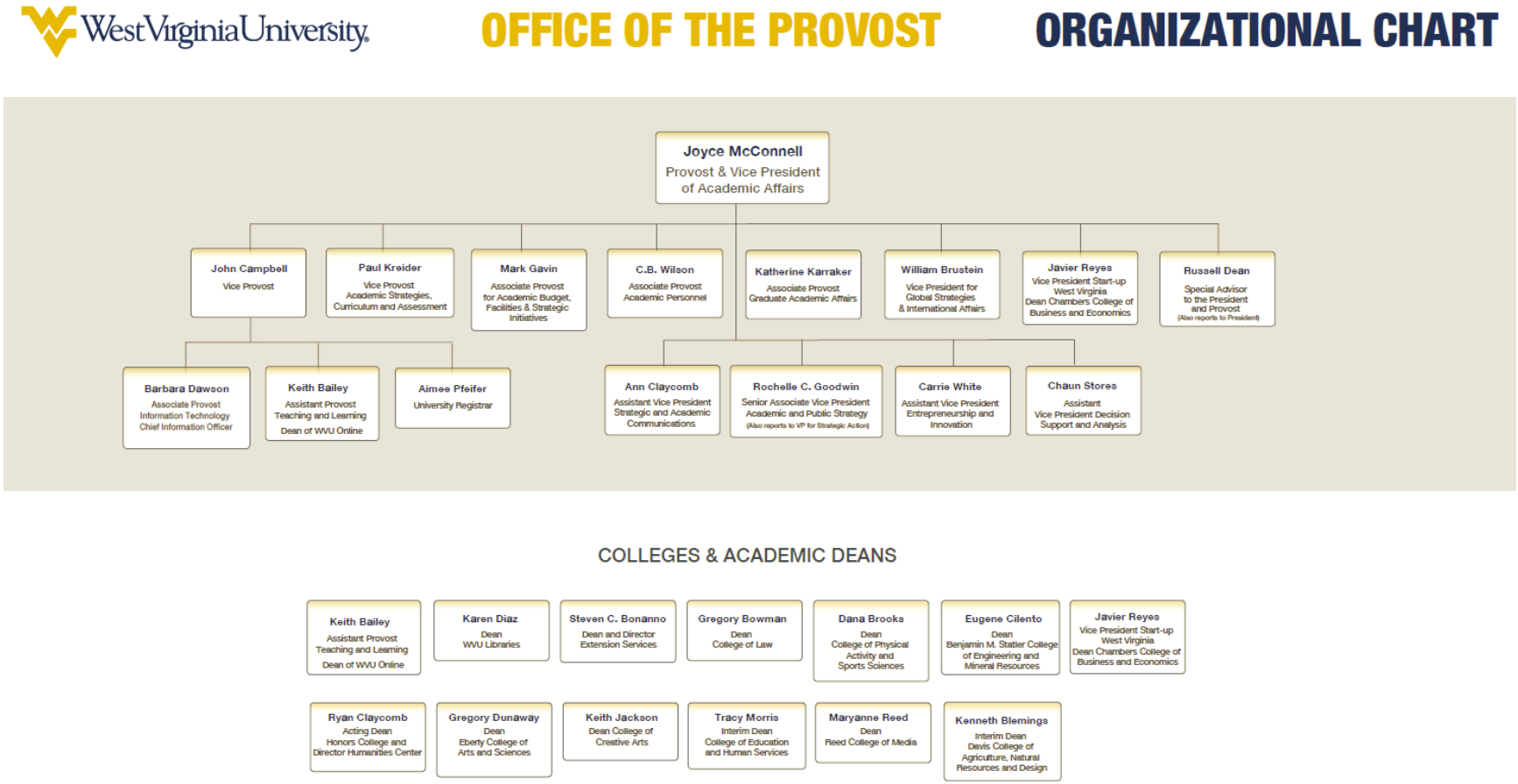


[1]Reports to both the Executive Dean & Vice president for Health Sciences, and the designated lead institutional official for West Virginia University.

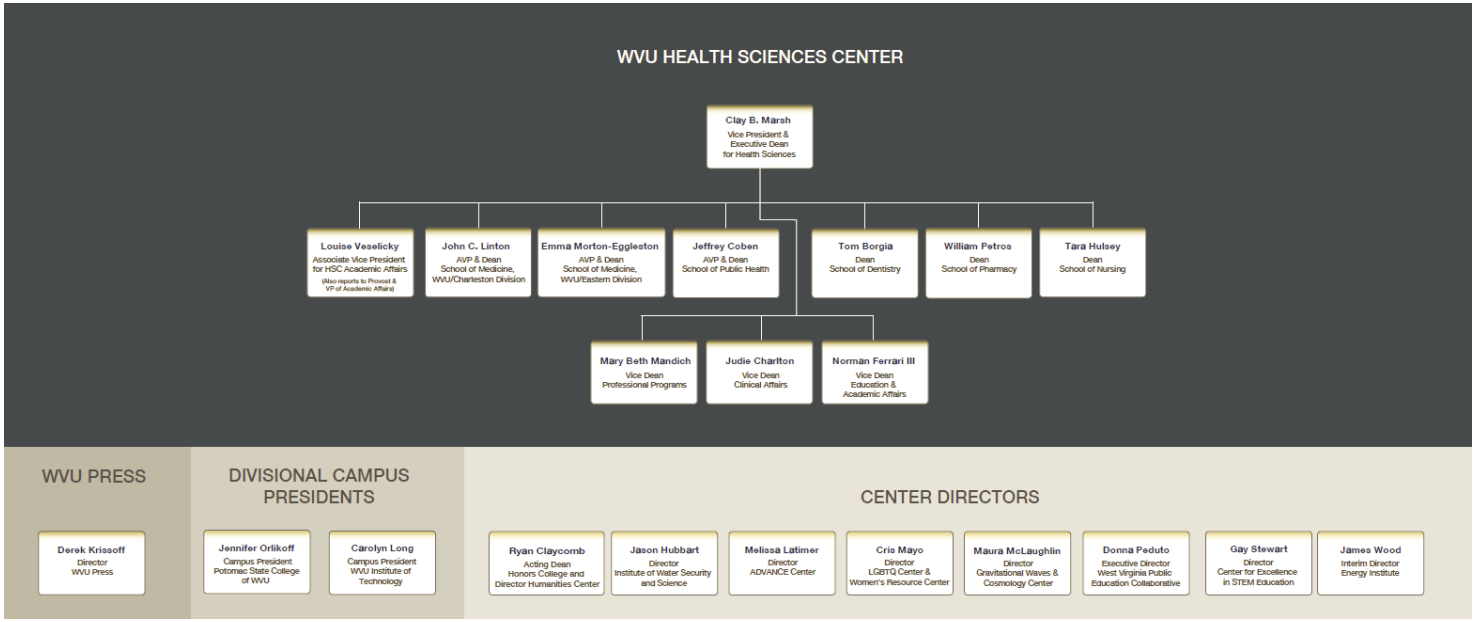
Intro Figure 3: WVU Organizational Chart



Intro Figure 4: Provost Organizational Chart



Intro Figure 4: Provost Organizational Chart (continued)



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.

Table Intro 1: Instructional Matrix - Degrees and Concentrations						
			Categorized as public health*	Campus based	Executive	Distance based
Bachelor's Degrees						
Public Health	BS		x	BS		
Health Services, Management and Leadership	BS			BS**		
Master's Degrees	Academic	Professional				
Biostatistics		MPH	x	MPH		
Epidemiology		MPH	x	MPH		
Health Policy		MPH	x	MPH		
Occupational and Environmental Health Science		MPH	x	MPH		
Social and Behavioral Sciences		MPH	x	MPH		MPH*
Biostatistics	MS			MS**		
Health Administration	MHA			MHA**		
School Health Education	MS					MS*
Doctoral Degrees	Academic	Professional				
Epidemiology	PhD		x	PhD		
Occupational and Environmental Health Science	PhD		x	PhD		
Social and Behavioral Sciences	PhD		x	PhD		
*Program(s) discontinued						
**Program additions						

This serves as our notice of a substantive change. See documentation provided in the Introduction section of the ERF.

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 D19) should separate those degrees and concentrations from the public health degrees for reporting student enrollments.

Table Intro 2: Enrollment		
Degree		Current Enrollment Fall 2019 (9-10-2019)
Master's		
	MPH-Biostatistics	6
	MPH-Epidemiology	9
	MPH-Health Policy, Management, and Leadership	7
	MPH-Occupational and Environmental Health Sciences	5
	MPH-Social and Behavioral Sciences	14
	MS-Biostatistics	7
Doctoral		
	PhD-Epidemiology	14
	PhD-Occupational and Environmental Health Sciences	7
	PhD-Social and Behavioral Sciences	7
Bachelor's		
	BS Public Health	173

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.

Please see section A1-1 in the ERF to view the committee charts with the names of current committee member.

Standing Committees

Dean's Council	
Chair	Dean
Composition	• Academic Dean • Administration Dean • Associate Dean for Professional Programs • Assistant Dean for Academic Affairs • Assistant Dean for Undergraduate Studies • Chair, Biostatistics • Chair, Epidemiology • Chair, Health, Policy, Management and Leadership • Chair, Occupational and Environmental Health Sciences • Chair – Social and Behavioral Sciences • Chief of Staff – Central Administration • Director of Marketing and Communications • Director of Research • Senior Business Planning Officer • Faculty Representative • Student Representative (SAPH President)
Charge	This Council is advisory to the Dean in all matters relating to the administration of the SPH. The Dean's Council may provide advice on any topic so requested by the Dean and may bring forth agenda items for discussion.

SPH Faculty Council	
Chair	Nominated into the position by the Council
Composition	All faculty that do not hold an administrative appointment
Charge	The central purpose of the Faculty Council is to institutionalize faculty input into the governance of the SPH, and to provide more effective communications of faculty perspective and concerns. The Faculty Council is advisory to the Dean and Dean's Council in all matters relating to the mission of the SPH. The Faculty Council may provide advice or input on any topic so requested by the Dean and may bring forth agenda items for discussion at the Dean's Council.

Promotion and Tenure	
Chair	A senior faculty member designated by the Dean
Composition	• Biostatistics Faculty Representative • Epidemiology Faculty Representative • Epidemiology Faculty Representative • Health, Policy, Management and Leadership Faculty Representative • Occupational and Environmental Health Sciences Faculty Representative • Occupational and Environmental Health Sciences Faculty Representative • Social and Behavioral Sciences Faculty Representative • Faculty Representative • Support Staff – Central Administration
Charge	To participate in annual evaluation and review for promotion and/or tenure of all faculty members in the SPH, and to serve in an advisory capacity to the Dean for the evaluation of academic qualifications of faculty members.

Curriculum	
Chair	To be voted on during the first meeting of the academic year
Composition	• Assistant Dean for Undergraduate Studies • Biostatistics Faculty Representative • Epidemiology Faculty Representative • Health, Policy, Management and Leadership Faculty Representative • Occupational and Environmental Health Sciences Faculty Representative • Social and Behavioral Sciences Faculty Representative • Christa Lilly • Support Staff • Student Representative
Charge	To participate in continuous evaluation and review of all degree and non-degree curricular proposals in the SPH, evaluate policies regarding SPH curricula and courses, direct curriculum/course proposals to the Dean and/or Associate Dean for Academic Affairs for action, and to forward to the appropriate WVU and HSC committees and councils, as appropriate.

Bylaws	
Chair	To be voted on during the first meeting of the academic year Sarah Knox, Faculty - Epidemiology
Composition	• Biostatistics Faculty Representative • Epidemiology Faculty Representative • Health, Policy, Management and Leadership Faculty Representative • Occupational and Environmental Health Sciences Faculty Representative • Social and Behavioral Sciences Faculty Representative • Support Staff/ Staff Representative • Student Representative
Charge	To perform regular, ongoing reviews of the SPH Faculty Bylaws and submit recommendations for modifications and amendments as needed.

Significant Ad Hoc Committees

Academic Affairs	
Chair	Academic Dean
Composition	• Associate Dean for Professional Programs • Assistant Dean for Academic Affairs • Assistant Dean for Undergraduate Studies • Chair, Biostatistics • Chair, Epidemiology • Chair, Health, Policy, Management and Leadership • Chair, Occupational and Environmental Health Sciences • Chair, Social and Behavioral Sciences • Chief of Staff – Central Administration • Curriculum Committee Chair • Director of Admissions and Recruitment • Director of Assessment • Director of Career Development • Director of PhD Program • Director of Practice and Service Learning • Educational Program Coordinator • Support Staff – Academic Affairs • Student Representative (SAPH Vice President)
Charge	The Academic Affairs Committee is charged with the review and development of educational programs and policies, evaluating degrees and degree programs, managing assurance and compliance with accrediting bodies, WVU Administrative Governance and WVU Bylaws, and making appropriate academic recommendation to the Dean and Academic Dean.

Academic and Professional Standards	
Chair	Academic Integrity Officer and MPH Director
Composition	• HPML Faculty • SBS Faculty • Patient Navigator Program Coordinator • Academic Dean • Student Representative • Assistant Dean, UG studies
Charge	The Academic and Professional Standards Committee Chair and its membership ensures that all WVU SPH students maintain the standards of academic integrity set forth by WVU administrative regulations, HSC, and the SPH. This committee also ensures student rights and due process during grade appeals, academic suspension, code of conduct violations, and all matters related to academic integrity.

Practice-Based Experience and Integrated Learning	
Chair	Director of Public Health Practice and Service Learning
Composition	• SBS Faculty* • EPI Faculty* • OEHS Faculty* • External Stakeholder - NIOSH • HPML Faculty* • Alumni Representative • *These faculty were appointed based on their practice-based research and/or experience
Charge	The purpose of this committee is to review the established competencies for Practice-Based Experience and Integrated Learning to ensure compliance, measures and appropriate assessments. This committee will determine the appropriateness of student practice proposals, evaluate student outputs, mentor students in respective SPH concentration areas, and provide support for preceptors. The committee will make recommendations for final grades in consultation with the Preceptor and appropriate faculty and based on the established metrics by the Director.

Research Advisory	
Chair	Director of Research
Composition	• BIOS Faculty • EPID Faculty • HPML Faculty • OEHS Faculty • SBHS Faculty/Center Director • SBHS Faculty • Student Representative
Charge	• To improve communication about SPH research, creative and scholarly activities. • To stay informed of the changes to University and federal policies affecting research activity and disseminate these changes to the School. • To counsel the Office of Research regarding research policies, procedures, and initiatives. • To act as a sounding board for both the Office of Research and all SPH Researchers. • To provide advice and recommendations to the Office of Research on matters pertaining to the research activities of the SPH. • To provide an internal grant review process, following faculty request, to review research proposals prior to submission and make recommendations to strengthen proposals for researchers seeking external funding. • To establish and oversee mentoring opportunities for young/junior investigators.

Accreditation and Compliance	
Chair	Academic Dean
Composition	• Associate Dean for Professional Programs, MPH Director • Previous Dean • Assistant Dean for Undergraduate Studies • Director of Assessment • External Stakeholder – Associate Vice President and Chief Strategy Officer for the HSC • Senior Staff, Accreditation Administration Lead • Student Representative
Charge	Oversight and development of Self-study and accreditation compliance for all accrediting bodies (HLC, BOG, CEPH, CAHME). In consultation with the Director of Assessment, provide the oversight for data collection, management and evaluation. Ultimate responsibility on all matters involving assessment and strategic planning.

Diversity Task Force	
Chair	Academic Dean
Composition	• Staff – Office of Student Affairs • Director of Public Health Practice and Service Learning • Staff – Central Administration • Director of Career Development & Student Success • Senior Associate Dean for Administration • Staff – HSC SOLE Site Support and Community Liaison- • Student Representative
Charge	The WVU SPH Diversity Task Force utilizes a train-the-trainer conceptual model to ensure that those with key and established roles in the SPH will utilize their respect positions to “train” others with administrative oversight for students, faculty, and staff, respectively. The Task Force will take immediate actions in terms of roles described, develop measurable goals, evaluate successes in each category highlighted in the guiding document, and provide regular updates to Dean Coben as part of a continuous improvement feedback loop. The fundamental purpose of the Task Force is to ensure that diversity, equity, inclusion, and the tenants of social justice are incorporated as overarching foci in the SPH.

Evaluation	
Chair	Director of Assessment
Composition	• Faculty representative from each department (BIOS, EPID, HPML, OEHS, SBHS) • Student representative
Charge	This committee now serves in an Ad Hoc role in order to facilitate and foster evaluative support for academic programs and policies in the SPH.

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

Graduate programs: Degree requirements are established by the faculty, academic affairs and curriculum committees based on accreditation requirements, and are regulated in conjunction with the Office of Graduate and Student Life and enforced by the University Provost.

Undergraduate program: Degree requirements are established by the faculty, academic affairs and curriculum committees based on accreditation requirements, and are regulated by the University.

Both the Academic Affairs Curriculum Committees ensure that program design complies with appropriate accreditation mandates.

b. curriculum design

Graduate programs: Revisions to curriculum are developed by the Senior Associate Dean for Academic Affairs, Director of Doctoral Programs, Director of the MPH Program, and the MS Program coordinator, all of whom serve on the Academic Affairs Committee. Final drafts of curriculum design are routed thorough the Course Inventory Management (CIM) system, Dean's Council, Academic Affairs and the Curriculum Committee for review, alteration and final approval.

Undergraduate program: Revisions to curriculum are developed by the Assistant Dean for Undergraduate Studies, who is informed by information and data collected from a variety of sources (faculty, students, stakeholders, publications, etc.). Final drafts of curriculum design are routed thorough the Course Inventory Management (CIM) system, Dean's Council, Academic Affairs and the Curriculum Committee for review, alteration and final approval.

c. student assessment policies and processes

All student assessment policies and process are governed by the Academic Affairs committee, Evaluation Committee, Practice-Based Experience and Integrated Learning Committee, Academic and Professional Standards Committee with oversight by the Director of Career Development and Student Success.

d. admissions policies and/or decisions

Graduate programs: MPH students are admitted at the department level by the department chair in conjunction with a designated faculty representative. Doctoral students are admitted by the department chairs of our three PhD concentrations. Other Master's level programs are governed by their respective program coordinators.

Undergraduate program: The undergraduate program directly admits first-time freshmen and external transfer students (from other academic institutions) if they meet the minimum

requirements; this is implemented by WVU Admissions and Recruitment. Current WVU students in other academic programs can transfer into the public health program if they meet the minimum academic requirements. Changes to these procedures would be vetted in the Academic Affairs and Curriculum committees.

All admissions decisions are governed by the Director of Admissions who serves on the Academic Affairs Committee. Appeals to admissions decisions would be reviewed by members of the Diversity Task Force and in the case of less than minimal qualifications for admission appeals would be made to the Academic and Professional Standards Committee.

e. faculty recruitment and promotion

Faculty Recruitment: Department search committees, assembled by the chairs on an ad hoc basis, normally handle faculty recruitment for positions within the respective departments. The search committee is responsible for ensuring that the proper procedures (as stipulated by the University) are followed in the search and hiring process. All search committees include a designated social justice representative who is responsible for assuring compliance with the University's affirmative action protocol. Whenever possible search committees include external partners, internal and external stakeholders, and student representatives. All committee members interview applicants, make recommendations, and have voting rights on the committee. All search committees make recommendations to the Dean, who serves as the ultimate hiring official.

Faculty Promotion: Procedures for faculty retention, promotion, and tenure follow University guidelines (https://faculty.wvu.edu/files/d/81af1f5c-c61a-4954-a0db-ed7cb69b369a/final-2014-2015-p-t-document-guidelines-5-14-2018.pdf) and specific SPH guidelines (available to view in section A1 of the ERF).

Annual evaluation and review at the department level is by a committee of faculty peers. WVU rules permit a "small school" approach; one committee with representatives from each department serves this function within the SPH (described in the Promotion and Tenure committee table above). Chairs also evaluate each faculty within a department. In addition, chairs provide annual goals, in consultation with the faculty member, and the committee acknowledges and evaluates progress toward these goals in the next annual review.

f. research and service activities

The Research Committee is responsible for assuring that all grantees follow the University level prescribed guidance for matters such as cost sharing and indirect revenue. The committee reviews and makes recommendations to the dean regarding research procedures and programs at the School. Required grant compliance is discussed during Dean's Council and/or Academic Affairs.

The School's promotion and tenure guidelines state that all faculty members are expected to demonstrate contributions in research, teaching, and service. How these expectations are translated into measurable and assessable activities are determined by each department. Annually, each chair and faculty member work together to develop a set of expectations and effort allocations in research, teaching and service. These work plans are included in the faculty member's file and shared with the members of the Promotion and Tenure Committee, to ensure that annual reviews of performance are evaluated against the agreed-upon expectations.

Table A1.2: Committees and Decisions						
Committee/Decision	a. degree requirements	b. curriculum design	c. student assessment, policies and processes	d. admissions policies and/or decisions	e. faculty recruitment and promotion	f. research and service activities
Dean's Council		X				
SPH Faculty Council						
Promotion and Tenure					X	X
Curriculum	X	X				
Bylaws						
Academic Affairs	X	X	X	X		
Academic and Professional Standards			X	X		
Practice-Based Experience and Integrated Learning			X			
Research Advisory						X
Accreditation and Compliance						
Diversity Task Force				X		
Evaluation						

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.

The School's Bylaws were updated in the fall of 2018 and approved in the spring of 2019. Please see Section A1-3 of the ERF for an updated copy of the bylaws.

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.

The SPH faculty members are actively contributing to the larger University community through their involvement in a full range of important committees and organizations. The following table summarizes SPH faculty involvement and membership on University committees.

Table A1.4: University Committee with Faculty Representation	
University Committee	# of Faculty
HSC Academic Associate Deans	2
HSC Budget Advisory Committee	1
HSC Clinical Trials Working Group	1
HSC CTSI Data Use Oversight Committee	1
HSC Diversity and Inclusion Committee	1
HSC Graduate Faculty Membership Committee	1
HSC Health Disparities Committee	1
HSC Internal Review Panel	1
HSC Inter-professional Education, Advisory Committee	1
HSC Learning Space Committee	1
HSC Scientific Advisory Committee of Junior and Mid-Level Faculty	1
HSC SOIL Committee	1
HSC Undergraduate Council	1
HSC Women in Science and Health Committee	2
HSC WVCTSI Steering Committee	2
WVU Associate and Assistant Dean's Meetings	1
WVU Campus Read	1
WVU Carnegie Community Engagement Reclassification Steering Committee	1
WVU Center for Cardiovascular and Respiratory Sciences Committee	1
WVU Chemical Hygiene Officer	1
WVU Council for Women's Concerns	1
WVU EB-1(B) Visa Evaluation Committee	1
WVU Faculty Senate	3
WVU Global Engagement Steering Committee	3
WVU Global Health Program Advisory Committee	1
WVU Graduate Council	1
WVU Health Sciences Safety Committee	1
WVU Institutional Review Board	2
WVU International Affairs Council	1
WVU Medicine Quality of Life Initiative Working Group	1
WVU Mountaineer Health Disparities Steering Committee	1
WVU Museum of the Health Sciences	1
WVU Open Access Library Fund	1
WVU Research Center on Violence	1
WVU School of Medicine Executive Committee	1
WVU Scientific Protocol Review Committee	1
WVU WVPBRN Planning Committee	1

WVU Faculty Senate, Inclusion and Diversity Committee: Lauri Andress, Chair.

The Faculty Senate Inclusion and Diversity Committee (IDC) is charged with undertaking the following set of actions:

- Assess and issue a University-wide report on the campus culture of inclusion, equity, and diversity to be carried out according to best practices but not less than every five years;
- Provide material, curricular support, and guidance, including an online toolkit, for faculty teaching and service related to diversity, equity, and inclusion;
- Establish and hold ongoing conversations with key units and stakeholders including but not limited to the Division of Diversity, Equity, and Inclusion, the office of Equal Opportunity and Affirmative Action, the Center for Excellence in Disabilities, the Center for Black Culture and Research, the ADVANCE program, the LGBTQ+ Center, the Office of Multicultural Affairs and external community leaders and stake holder groups that work to further social justice and inclusion in West Virginia;
- Evaluate periodically national trends and report on best practices related to diversity and inclusion, and make recommendations to appropriate University bodies including the Office of the Provost, the Teaching and Learning Commons, and other Centers, Colleges, Schools and programs affiliated with the University;
- Report on systems and mechanism that provide support to faculty who engage in research and scholarship on issues related to social status including but not limited to race, ethnicity, income, gender, sexuality, and religion;
- Address in a timely fashion other issues pertinent to the charge of the committee.

WVU Graduate Council: Alfgeir Kristjansson, voting member

The charge of the Graduate Council is to (1) formulate and recommend policy for graduate study at West Virginia University and (2) assist in the oversight of graduate programs, including coordinating periodic reviews.

HSC Women in Science and Health Committee, Professional Development: Linda Alexander, Co-chair

The Women In Science & Health Committee (WISH) was established with the following charge:

- To enhance the advancement of women through professional development programs.
- Establishing an effective network of women faculty.
- Assessing the current status of women faculty in terms of academic rank, years of service and salary plus incentives.
- Developing and implementing a faculty mentoring program for women.

WVU Institutional Review Board: Stephen Davis, Vice-chair of the Blue Board

WVU has two IRBs, appointed by the Institutional Official (IO). The IRBs prospectively review and make decisions concerning all human research conducted at WVU facilities, by its employees or agents, or under its auspices. The IRB is responsible for the protection of rights and welfare of human research subjects at WVU. It discharges this duty by complying with the requirements of the Common Rule; state regulations; the FWA; and institutional policies.

Please see Section A1-4 of the ERF for the list of University Committees represented by Public Health Faculty.

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.

All full-time and part-time faculty are expected to receive training, guidance, expectations, University-level requirements, and academic policies and procedures regardless of their status as full or part time. All teaching faculty are included on correspondence pertaining to teaching updates such as those described above. Additionally, all teaching faculty, regardless of status are included in social occasions, All-Hands Meetings, invitations to colloquia and training, and are considered part of the SPH family.

Please see Section A1-5 of the ERF.

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

Strengths: Faculty have the opportunity to be engaged in various levels of decision making at the SPH. Our values as a community dictate that full and part time faculty not be treated differently and have full benefit of the resources and support of the SPH when appropriate.

Weaknesses: We have not historically tracked participation at many events and activities that would demonstrate the engagement of full time and part time faculty. In the fall of 2018 we provided direction to Departmental Administrative Assistants to ensure adequate documentation of meetings. Additionally, the Senior Associate Dean for Administration has formally assigned an administrator to all committees. In the absence of someone to keep meeting minutes we have encouraged the use of recorders.

Plans: Moving forward the SPH will develop meeting templates and an online system that they can upload their documents centrally

A2. Multi-Partner Schools

The school has a single identified leader (dean or director) and a cohesive chain of authority for all decision making relevant to the educational school that culminates with this individual.

1) Describe the major rights and responsibilities of each participating institution.
2) A copy of the formal written agreement that establishes the rights and obligations of the participating universities in regard to the school's operation.
3) Describe the role and responsibilities of the identified leader.
4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

This criterion is not applicable.

A3. Student Engagement

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

1) Describe student participation in policymaking 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.

School-Level Participation

WVU SPH students play an active role in policymaking and decisions affecting the school on all levels. Student leadership is ultimately governed through the Office of Academic and Student Affairs, which oversees all student organizations within the School. Student representatives serve on all standing and administrative committees, as appropriate, with the exception of the Promotion and Tenure and PhD Advisory Committee(s). Students serve as full members and are equal to other committee members with regard to input, decision-making, and voting. Students who serve on standing committees are charged with reporting to the student body the activities and decisions of all committees, via SAPH meetings and the Student E-News. Students are also involved in faculty and staff leadership position searches, as appropriate. During the most recent Strategic Planning Process, students were actively invited to provide commentary through Qualtrics surveys at each step of the process. Additionally, student feedback has been a key piece of our process through on-campus meetings, their respective roles on standing committees, and incentivized by instructors who gave "extra credit" for student participation. Students will continue to be involved as the School continues to grow. Feedback from the student body is vital to the direction of the School.

One of the more prominent and visible methods of student participation is the Student Association of Public Health (SAPH). Per the SAPH mission statement, they "serve as a liaison between all students in the West Virginia University School of Public Health Educational Programs and the program faculty and staff." SAPH often engages, and invites School leadership, i.e. the Dean and Senior Associate Dean of Academic Affairs, to at least one meeting per year for a discussion of current/future student needs. Additionally, student focus groups have been utilized to solicit feedback for curricula refresh/redesigns at the masters and doctoral levels. Upon graduation, all students receive an exit survey from the SPH to ask about their satisfaction with the program they completed. As part of that survey, students are given open-ended questions to solicit thoughts on what they would like to see revised, how the School's infrastructure could be more responsive to student needs, and insights regarding the transparency of School leadership.

Committee Participation

Dean's Council: Beginning in the 2018/2019 academic year, the elected President of the Student Association of Public Health has been appointed to Dean's Council to serve as the liaison between Dean's Council and the student body via the Student Association of Public Health. Students serve one-year appointments during the time they hold their SAPH leadership position.

Academic Year	Student
2019-20	Mohini Chatterji, MPH student (SAPH President)
2018-19	Laurent Ferrell, MPH student (SAPH President)
2017-18	No Student Representative

Academic Affairs Committee: Beginning in the 2018/2019 academic year, the elected Vice President of the Student Association of Public Health has been appointed to the Academic Affairs Committee to serve as the liaison between the Academic Affairs and the student body via the Student Association of Public Health. Students serve one-year appointments during the time they hold their SAPH leadership position.

Academic Year	Student
2019-20	Kruti Pandya, MPH student (SAPH Vice President)
2018-19	Katie Cranmer, MPH student (SAPH Vice President)
2017-18	No Student Representative

Curriculum Committee: During the first formal meeting of the academic year, the Chair of the Curriculum committee seeks recommendations for students from members of the committee**.** The preference is to select a PhD student who is more familiar with curricular needs.

Academic Year	Student
2019-20	Brenna Kirk, PhD student
2018-19	Stephen Heck, PhD student
2017-18	No Student Representative

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

Strengths: Student run elections for leadership positions for two organizations (Delta Omega and Student Association of Public Health). Leadership positions are open to students from all SPH degree programs.

Weakness: Faculty have always championed the involvement of students as a part of the decision making in the School. As faculty have had oversight for committees and projects they have solicited participation from their students. During periods of administrative transition, maintaining and monitoring these appointments has been difficult. Until the arrival of the Director of Career Services and Student Success, there was no formal process for the appointment of students on committees. Mr. Scot McIntosh was hired in this role and has oversight for alumni, student committees, and student academic programs, and began instituting formal processes in July 2017.

Plans: Continue working on language for appointing SPH students to more standing committees within the School, where appropriate. Formalize a nomination and election process to have representatives from the bachelors, masters, and doctoral levels.

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 Dean of the SPH reports to the Vice President and Executive Dean for Health Sciences of West Virginia University. The Vice President and Executive Dean for Health Sciences reports to the President of the University.

Please see Section A4-1 of the ERF for the organizational chart.

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 relationship and level of independence as all other deans of the schools housed within the HSC all of whom report directly to the Vice President for HSC. On a routine basis, the Dean meets individually with the Vice President of the HSC, and attends twice-monthly HSC Leadership meetings, which includes all HSC School Deans and other executive leadership. The SPH operates at the highest level of organizational status and independence available within the University framework.

The SPH Dean also attends monthly University-wide Dean's meetings chaired by the WVU Provost. The primary purpose of the Provost's meeting is to provide direction and facilitate collaboration among the colleges and schools. The Provost also has overall authority for all WVU academic programs; with the SPH and other HSC schools operating under the WVU graduate and undergraduate policies and procedures in addition to those specific to the HSC.

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

Strengths: The strength of this organizational structure center is that the Dean of the SPH has great visibility within the HSC and within the University. He/she has the ability to escalate issues to the highest level and make sure that important issues/challengers stay front and center.

Weaknesses: There does not appear to be weaknesses in this model.

Plans: N/A

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 distinct concentrations (as defined by competencies in Criterion D4) and public health doctoral degree programs (academic or professional) in at least two concentrations (as defined by competencies in Criterion D4). 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 MPH is offered in five concentrations (Biostatistics, Epidemiology, Health Policy, Management & Leadership, Occupational and Environmental Health Sciences, and Social & Behavioral Sciences) and the PhD in three concentrations (Epidemiology, Occupational and Environmental Health Sciences, and Social & Behavioral Sciences). Degree offerings are summarized in Table Intro-1.

(see Table Intro 1: Instructional Matrix on page 9 or in section A5-1 of the ERF)

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

The official catalog for the undergraduate program can found at:
http://catalog.wvu.edu/undergraduate/schoolofpublichealth/#text

The official catalog for the graduate programs can be found at:
http://catalog.wvu.edu/graduate/publichealth/

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) A one- to three-page document that, at a minimum, presents the school's vision, mission, goals and values.

This Self-Study is being finalized as WVUSPH is engaged in an active transition phase as part of a renewed strategic emphasis. The School's first five-year strategic plan (Strategic Plan 2020) was finalized as part of a collaborative input process in 2014. The School has operated with the guiding statements from the 2020 plan since the last CEPH-self-study period. However, a major leadership change in the SPH, the advent of the first graduating class in the newly added baccalaureate degree, the planned addition of a Masters in Health Administration and significant collaborative relationships with external collaborators dictated the need to reexamine the 2020 Strategic Plan. Our School embarked on a new process in 2019 to revise/clarify the existing guiding statements, reduce redundancy in strategic aims, and better reflect the future direction of the SPH. This renewed process was timely given the end in sight for the original plan.

While the current planning process is still underway, a *Strategic Compass* has been developed. We have formed a Strategic Process Steering Committee and Strategic Priority Team Leaders with respective committee members will contribute to the revised evaluation plan. After reassessment of the existing plan, it was determined that the School's values would remain the same. The following represents our guiding focus during the three years of the Self-Study:

Guiding Statements from 2020 Strategic Plan

Mission

The mission of the West Virginia University School of Public Health is to improve the health of West Virginians through innovation and leadership in education, research, and service.

We achieve this by:

- Implementing educational programs that produce highly qualified practitioners, educators, and researchers.
- Promoting interdisciplinary research to understand and solve complex health problems with local impact and global significance.
- Engaging communities, businesses, and government partners in accomplishing our shared mission.

Vision

The School's vision is to be internationally recognized for demonstrating how academic public health can transform lives.

Values

The School of Public Health is guided by the following values:

- *Community Engagement*: we are proud of the communities we serve, and recognize the importance of bidirectional participatory activities.
- *Collaboration*: we collaborate with partners who join us in improving the public's health.
- *Equity*: we promote equity and social justice in defining health and eliminating health disparities.
- *Integrity*: we adhere to the highest ethical standards of honesty and fairness and we recognize that integrity and ethical behavior are essential elements of our professions.
- *Respect*: we respect diverse points of view and the cultural heritage and traditions of all people.
- *Accountability*: we hold ourselves accountable to one another and to the many stakeholders who support the School of Public Health.

The strategic goals connected to our mission, vision, values, and goals can be found in Table B5-1 of the ERF.

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

Goals & Objectives from the 2020 Strategic Plan

(Complete Plan in section B1 of the ERF)

- Develop and maintain educational programs that produce highly qualified practitioners, educators, and researchers.
    - Expand the number of students applying, matriculating, and graduating
    - Improve student success and satisfaction
    - Implement strategies to achieve a more diverse student population
    - Address the public health workforce needs of West Virginia

- Foster interdisciplinary research addressing health priorities and disparities that are relevant to West Virginia and the surrounding Appalachian region.
    - Expand our research portfolio
    - Expand interdisciplinary research collaborations and partnerships

- Promote collaboration, community engagement, outreach, and service.
    - Support activities that outreach to the citizens of West Virginia and address community needs
    - Promote and support student involvement in outreach and community service activities

- Build an organizational infrastructure and culture that fosters success.
    - Expand, diversify, and enrich our workforce
    - Improve the identifiable presence of the School of Public Health
    - Improve support services to faculty, students and staff
    - Maintain an open and inclusive governance structure that includes students, staff, and faculty

- Implement a School-wide process of continuous quality improvement

Please see section B1of the ERF for:

- SPH Strategic Compass (Revised Guiding Statements)
- SPH Planning Process (PowerPoint)
- SPH Strategic Task Force Inaugural Meeting

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

Strengths: The development of the 2020 Strategic Plan was a collaborative process that engaged SPH constituents, stakeholders, collaborative partners, faculty, staff, students and alumni.

Weaknesses: In 2019, the SPH acknowledged that the 2020 Strategic Plan was written under different HSC leadership, did not include our newly added baccalaureate degree, and did not fully articulate our focus as the only CEPH-accredited SPH in West Virginia.

Plans: A renewed focus on measurable objectives/goals has been developed through a 6-month strategic visioning exercise. This process included various external and internal partners and resulted in a strategic compass to guide the direction of our future. In addition, the School has developed a robust process to operationalize the priorities and goals that were articulated in the strategic compass – turning strategic goals into action.

B1 Figure 1: 2019 Strategic Compass

WVU School of Public Health – Strategic Compass

Student Centric

- Develop students into public health leaders.
- Engage students in academic program development and robust career counseling.
- Foster success by building on the unique strengths of today's students.
- Promote growth and development of vibrant student and alumni associations.

Meaningful Collaborations

- Develop meaningful partnerships and seek new opportunities to deliver public health benefits.
- Integrate community, state, and university initiatives that strive to improve interrelating determinants of health.
- Educate policy makers and the general public on evidence-based practices and policies.

MISSION

Improve the quality of life for West Virginians and all who call Appalachia home.

VISION

Healthy people in thriving communities.

Impactful Discovery

- Enable scholarly activity that benefits the public's health.
- Develop and implement interventions that reach whole populations.

Inspiring Education

- Deliver competitive academic programs.
- Provide classroom and community-based experiential learning opportunities that focus on pressing 21st century public health challenges.
- Cultivate an inclusive, dynamic, productive, and efficient work and learning environment.
- Prepare students with the knowledge, skills and abilities needed to influence public health behavior and impact public health outcomes.

B2. 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 B2-1.

Table B2-1.1: BS-Public Health (ALL UG STUDENTS)

	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	18				
	# Students withdrew, dropped, etc.					
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	14	65			
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0			
	Cumulative graduation rate	0%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	14	54	102		
	# Students withdrew, dropped, etc.					
	# Students graduated	12	15	0		
	Cumulative graduation rate	86%	24%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	37	89	53	
	# Students withdrew, dropped, etc.					
	# Students graduated	0	1	0	0	
	Cumulative graduation rate	86%	25%	0%	0%	

	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					

**Maximum Time to Graduate: 8 years*

Table B2-1.2: BS-Public Health (FIRST TIME FRESHMEN AND FIRST TIME TRANSFER STUDENTS)						
Reporting Year	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)		17			
	# Students withdrew, dropped, etc.					
	# Students graduated		0			
	Cumulative graduation rate		0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)		10	23		
	# Students withdrew, dropped, etc.					
	# Students graduated		2	0		
	Cumulative graduation rate		12%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)		7	15	11	
	# Students withdrew, dropped, etc.					
	# Students graduated		0	0	0	
	Cumulative graduation rate		12%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					

**Maximum Time to Graduate: 8 years*

***Program not active in academic year 2015-16*

Table B2-1.3: MS-School Health Education									
	Cohort of Students	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered	16							
	# Students withdrew, dropped, etc.								
	# Students graduated	0							
	Cumulative graduation rate	0%							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	12	15						
	# Students withdrew, dropped, etc.								
	# Students graduated	5	0						
	Cumulative graduation rate	31%	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	8	9	9					
	# Students withdrew, dropped, etc.								
	# Students graduated	5	4	0					
	Cumulative graduation rate	63%	27%	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	3	4	9	7				
	# Students withdrew, dropped, etc.								
	# Students graduated	2	3	5	1				
	Cumulative graduation rate	75%	47%	56%	14%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	0	2	6	5			
	# Students withdrew, dropped, etc.								
	# Students graduated	1	0	1	2	1			
	Cumulative graduation rate	81%	47%	67%	43%	20%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	2	4	4	6		
	# Students withdrew, dropped, etc.								
	# Students graduated	0	0	2	3	2	0		
	Cumulative graduation rate	81%	47%	89%	86%	60%	0%		

	Cohort of Students	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	1	1	5	1	
	# Students withdrew, dropped, etc.								
	# Students graduated	0	0	0	0	1	2	0	
	Cumulative graduation rate	81%	47%	89%	86%	80%	33%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)								
	# Students withdrew, dropped, etc.								
	# Students graduated								
	Cumulative graduation rate								

**Maximum Time to Graduate: 8 years*

Table B2-1.4: MPH- Biostatistics								
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	2						
	# Students withdrew, dropped, etc.							
	# Students graduated	0						
	Cumulative graduation rate	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2					
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0					
	Cumulative graduation rate	0%	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	1				
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0				
	Cumulative graduation rate	0%	0%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	1	1			
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	1	0			
	Cumulative graduation rate	0%	0%	100%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	1	0		
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	1	0		
	Cumulative graduation rate	0%	0%	100%	100%	0%		

	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	0	0	1	
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	0	0	0	
	Cumulative graduation rate	0%	0%	100%	100%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							

**Maximum Time to Graduate: 8 years*

Table B2-1.5: MPH-Epidemiology								
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	6						
	# Students withdrew, dropped, etc.							
	# Students graduated	0						
	Cumulative graduation rate	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	5	9					
	# Students withdrew, dropped, etc.							
	# Students graduated	5	0					
	Cumulative graduation rate	83%	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	6	3				
	# Students withdrew, dropped, etc.							
	# Students graduated	0	4	0				
	Cumulative graduation rate	83%	44%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	3	10			
	# Students withdrew, dropped, etc.							
	# Students graduated	0	1	3	0			
	Cumulative graduation rate	83%	56%	100%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	10	6		
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	9	0		
	Cumulative graduation rate	83%	56%	100%	90%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	0	6	3	
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	0	0	0	
	Cumulative graduation rate	83%	56%	100%	90%	0%	0%	

	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							

**Maximum Time to Graduate: 8 years*

Table B2-1.6: MPH- Health Policy								
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	4						
	# Students withdrew, dropped, etc.							
	# Students graduated	0						
	Cumulative graduation rate	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	9					
	# Students withdrew, dropped, etc.							
	# Students graduated	4	0					
	Cumulative graduation rate	100 %	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	7	6				
	# Students withdrew, dropped, etc.							
	# Students graduated	0	7	0				
	Cumulative graduation rate	100 %	78%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	5	5			
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	4	0			
	Cumulative graduation rate	100 %	78%	67%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	1	4	4		
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	2	3	0		
	Cumulative graduation rate	100 %	78%	100%	75%	0%		

	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	1	2	4	
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	2	0	0	
	Cumulative graduation rate	100 %	78%	100%	100%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							

**Maximum Time to Graduate: 8 years*

Table B2-1.7: MPH-Occupational and Environmental Health Sciences								
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	5						
	# Students withdrew, dropped, etc.	0						
	# Students graduated	0						
	Cumulative graduation rate	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	5	6					
	# Students withdrew, dropped, etc.	0	0					
	# Students graduated	5	0					
	Cumulative graduation rate	100 %	0					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	4	6				
	# Students withdrew, dropped, etc.							
	# Students graduated	0	4	0				
	Cumulative graduation rate	100 %	67%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	4	5			
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	3	0			
	Cumulative graduation rate	100 %	67%	50%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	5	0		
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	4	0		
	Cumulative graduation rate	100 %	67%	50%	80%	0%		

	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	1	1	0	4	
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	0	0	0	
	Cumulative graduation rate	100 %	67%	50%	80%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							

**Maximum Time to Graduate: 8 years*

Table B2-1.8: MPH-Social and Behavioral Sciences								
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)	7						
	# Students withdrew, dropped, etc.							
	# Students graduated	0						
	Cumulative graduation rate	0%						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	7	12					
	# Students withdrew, dropped, etc.							
	# Students graduated	6	0					
	Cumulative graduation rate	86%	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	11	5				
	# Students withdrew, dropped, etc.							
	# Students graduated	1	9	0				
	Cumulative graduation rate	100 %	75%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	1	2	12			
	# Students withdrew, dropped, etc.							
	# Students graduated	0	1	2	0			
	Cumulative graduation rate	100 %	83%	40%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	11	9		
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	5	0		
	Cumulative graduation rate	100 %	83%	40%	42%	0%		

	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	1	6	7	4	
	# Students withdrew, dropped, etc.							
	# Students graduated	0	0	0	0	0	0	
	Cumulative graduation rate	100 %	83%	40%	42%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)							
	# Students withdrew, dropped, etc.							
	# Students graduated							
	Cumulative graduation rate							

**Maximum Time to Graduate: 8 years*

Table B2-1.9: MS-Biostatistics						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	2				
	# Students withdrew, dropped, etc.					
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2			
	# Students withdrew, dropped, etc.					
	# Students graduated	2	0			
	Cumulative graduation rate	100%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	2	0		
	# Students withdrew, dropped, etc.					
	# Students graduated	0	2	0		
	Cumulative graduation rate	100%	100%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	0	0	5	
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0	0	0	
	Cumulative graduation rate	100%	100%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					

**Maximum Time to Graduate: 8 years*

Table B2-1.10: PHD-Social and Behavioral Sciences						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	2				
	# Students withdrew, dropped, etc.					
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2			
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0			
	Cumulative graduation rate	0%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2	1		
	# Students withdrew, dropped, etc.					
	# Students graduated	1	0	0		
	Cumulative graduation rate	50%	0%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	2	1	3	
	# Students withdrew, dropped, etc.					
	# Students graduated	0	1	0	0	
	Cumulative graduation rate	50%	50%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					

**Maximum Time to Graduate: 8 years*

Table B2-1.11: PHD-Occupational and Environmental Health Sciences						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	2				
	# Students withdrew, dropped, etc.					
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2			
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0			
	Cumulative graduation rate	0%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	2	0		
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0	0		
	Cumulative graduation rate	0%	0%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	1	0	0	
	# Students withdrew, dropped, etc.					
	# Students graduated	0	0	0	0	
	Cumulative graduation rate	0%	0%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)					
	# Students withdrew, dropped, etc.					
	# Students graduated					
	Cumulative graduation rate					

**Maximum Time to Graduate: 8 years*

Table B2-1.12: PHD-Epidemiology							
	Cohort of Students	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2012-13	# Students entered						
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						
2013-14	# Students continuing at beginning of this school year (or # entering for newest cohort)						
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	4					
	# Students withdrew, dropped, etc.						
	# Students graduated	0					
	Cumulative graduation rate	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	2				
	# Students withdrew, dropped, etc.						
	# Students graduated	0	0				
	Cumulative graduation rate	0%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	2	2			
	# Students withdrew, dropped, etc.						
	# Students graduated	0	0	0			
	Cumulative graduation rate	0%	0%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	2	2	3		
	# Students withdrew, dropped, etc.						
	# Students graduated	2	1	0	0		
	Cumulative graduation rate	50%	50%	0%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	1	2	3	2	
	# Students withdrew, dropped, etc.						
	# Students graduated	0	0	0	0	0	
	Cumulative graduation rate	50%	50%	0%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)						
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						

**Maximum Time to Graduate: 8 years*

2) Data on doctoral student progression in the format of Template B2-2.

Table B2-2: Doctoral Student Progression			
	Doctoral concentration 1 EPID	Doctoral concentration 2 OEHS	Doctoral concentration 3 SBHS
# newly admitted in 2019-2020	6	0	3
# currently enrolled (total) in 2019-2020	15	7	8
# completed coursework during 2018-2019	8	4	4
# in candidacy status (cumulative) during 2018-2019	3	4	3
# graduated in 2018-2019	2	1	2

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.

PhD program: The WVU SPH is allocated 10 slots for funding PhD students per year from the HSC. These slots include a tuition waiver and monthly stipend. Under normal circumstances this funding is allocated to 1st and 2nd year PhD students, while they conduct their course work. During the 2019 – 2020 academic calendar year, 10 students were offered slots in the program, 9 accepted the offer (line 2).

Overall, 30 students are currently enrolled into the program (line 3). Sixteen students completed their course work during the 2018-2019 academic year, advancing to the qualifying exam, and then into candidacy with a matched mentor that typically funds their stipend during their independent research phase (line 4). Ten students were in candidacy during the 2018-2019 academic year and had passed their qualifying exam. Finally, five students graduated from the WVU PhD Public Health program during the academic year.

MPH/MS program: Standards met

Undergraduate program: Standards met

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

Strengths:

- SPH PhD admissions policy is based on the goal to have full-time students fully funded until graduation. The program's curriculum offerings, mentoring and advising all support this goal.
- By accepting transfer students, the BSPH program already has graduates, despite the fact that it is less than four years old.

Weaknesses: Two possible reason that contribute to the PhD program falling below a 60% graduation rate are 1) working professionals enrolled as a part-time student or 2) unclear framework, on our

behalf, which we have been addressing by tightening the funding promise timeline in the contract letters and monitoring student progress more closely.

Plans: PhD program – Conduct annual progress reviews (spring semester) and meet with the student and department chair when progress is deemed inadequate.

B3. 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 B3-1. (2018-19 will be updated after we submit our annual report.)

Table B3-1.1: Post-Graduation Outcomes BS			
	2015/2016 Number and percentage	2016/2017 Number and percentage	2017/2018 Number and percentage
Employed	N/A	N/A	16 (57%)
Continuing education/training (not employed)	N/A	N/A	6 (21%)
Not seeking employment or not seeking additional education by choice	N/A	N/A	1 (4%)
Actively seeking employment or enrollment in further education	N/A	N/A	0 (0%)
Unknown	N/A	N/A	5 (18%)
Total graduates (known + unknown)	N/A	N/A	28 (100%)

Table B3-1.2: Post-Graduation Outcomes MPH			
	2015/2016 Number and percentage	2016/2017 Number and percentage	2017/2018 Number and percentage
Employed	34 (81%)	18 (66.7%)	20 (74%)
Continuing education/training (not employed)	4 (10%)	5 (18.5%)	3 (11%)
Not seeking employment or not seeking additional education by choice	1 (2%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	1 (4%)
Unknown	3 (7%)	4 (14.8%)	3 (11%)
Total graduates (known + unknown)	42 (100%)	27 (100%)	27 (100%)

Table B3-1.3: Post-Graduation Outcomes MS			
	2015/2016 Number and percentage	2016/2017 Number and percentage	2017/2018 Number and percentage
Employed	13 (100%)	12 (92%)	9 (82%)
Continuing education/training (not employed)	0 (0%)	0 (0%)	0 (0%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)
Unknown	0 (0%)	1 (8%)	2 (18%)
Total graduates (known + unknown)	13 (100%)	13 (100%)	11 (100%)

Table B3-1.4: Post-Graduation Outcomes PHD			
	2015/2016 Number and percentage	2016/2017 Number and percentage	2017/2018 Number and percentage
Employed	3 (100%)	7 (100%)	10 (100%)
Continuing education/training (not employed)	0 (0%)	0 (0%)	0% (0%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0% (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0% (0%)
Unknown	0 (0%)	0 (0%)	0% (0%)
Total graduates (known + unknown)	3 (100%)	7 (100%)	10 (100%)

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

The MPH, MS, and PhD programs have consistently exceeded the 80% rate, with a 100% career placement rate for our last three PhD cohorts. The BSPH cohort listed has a placement rate of 78% with an additional 18% unknown data. Data collection for that BSPH cohort is ongoing and is being collected by the School's Director of Career Development and Student Success. The data collection process for the 2017/2018 cohort was formally initiated in July 2019 after the graduates had a full year post-graduation to identify their next steps. It is highly likely the rate will exceed 80% for the BSPH students by the time the cohort data is formally reported to ASPPH in November 2019.

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

Strengths: Our graduate programs consistently exceed the threshold for employment.

Weaknesses: The newness of our BSPH program lends itself to a lack of career placement data for this population.

Plans: The Director of Career Development & Student Success has been assigned as the instructor of record for a career focused undergraduate course (PUBH 200 – Intro to Public Health Careers and Information). The course is required for all undergraduate students and the instructor has built

assignments into the course that will assist with future tracking of post-graduation outcomes. For instance, all students must create a LinkedIn profile for credit. They must connect with the Director of Career Development & Student Success and all of their peers in their course section. Additionally, they are required to join a course specific LinkedIn group for additional tracking.

B4. Alumni Perceptions of Curricular Effectiveness

For each public health degree offered, the school collects information on alumni perceptions of their own success in achieving defined competencies and of their ability to apply these competencies in their post-graduation placements.

The school defines qualitative and/or quantitative methods designed to maximize response rates and provide useful information. Data from recent graduates within the last five years are typically most useful, as distal graduates may not have completed the curriculum that is currently offered.

1) Summarize the findings of alumni self-assessment of success in achieving competencies and ability to apply competencies after graduation.

In spring 2018, the Director of Assessment and the Director of Career Development and Student Success worked on the development of a comprehensive alumni survey to capture data relevant to program competencies and the new CEPH criteria.

Valuable feedback from alumni who entered the program prior to the revised curriculum was solicited in March, May and October of 2017, respectively (see agenda and conversation threads in section B4-1 of the ERF). During a focus group session at an alumni breakfast, participants were asked about their preparation for the workforce and to comment on the 2016 MPH curriculum criteria in the context of their experience. In follow-up meetings, alumni were asked specifically about their practice-based experiences and overall MPH experiences as part of preparation for their current positions. Qualitative feedback from both of these sessions revealed the following summary comments:

- More preparation needed in grant writing and professional writing
- More opportunities to practice professional speaking
- Practicum experience was a direct link to current position
- Career development and job readiness skills are a must
- More training in SAS and SPSS

An additional outcome from active alumni participation and involvement in the SPH during the 2016-2018 years was the desire for an Alumni Mentoring Program (see section B4-1 of the ERF). Previously, alumni have indicated that formal or informal mentoring is likely to enhance students' ability to maximize the effectiveness in applying coursework and harnessing this knowledge into job readiness skills. Currently, mentoring events are dependent on student interest and will continue to be encouraged by the new Director of Alumni Affairs.

Doctoral Students in our program are required to have teaching experience and a first authored publication prior to graduation. Consistent feedback from graduates of our three doctoral concentrations since 2017, through their mentors and the Director of Doctoral Programs indicates that both of these requirements have prepared them for job readiness. The current doctoral program is being revised to better integrate the MPH core as a foundation for those who enter our program without an MPH degree and a common core based on skills rather than discipline specific content. Graduates of this program will be surveyed in the future to determine job readiness based on revisions to the curriculum.

The SPH graduated our first undergraduate students in December 2017. These December graduates along with the next two years of graduates transferred from other Health Sciences programs at WVU (i.e. nursing, physical therapy, rehabilitative sciences) and thus did not have the benefit our full BSPH curriculum. The 2019 cohort will be the first to enter, as freshmen, and to be survived after graduation.

2) Provide full documentation of the methodology and findings from alumni data collection.

See data in the B4-2 section of the ERF.

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

Strengths: The School has a strong track record (2014-thru present) of continuous solicitation of feedback from alumni regarding curricula effectiveness. Our current leadership in assessment and program effectiveness constitutes regular alumni contact and feedback from the Director of Career Development and Student Success, the Director of Assessment, Program Directors, and a formal alumni council now led by Scot McIntosh.

Weaknesses: N/A

Plans: N/A

B5. Defining Evaluation Practices

The school defines appropriate evaluation methods and measures that allow the school to determine its effectiveness in advancing its mission and goals. The evaluation plan is ongoing, systematic and well-documented. The chosen evaluation methods and measures must track the school's progress in 1) advancing the field of public health (addressing instruction, scholarship and service) and 2) promoting student success.

1) Present an evaluation plan that, at a minimum, lists the school's evaluation measures, methods and parties responsible for review. See Template B5-1.

Table B5-1: Evaluation Plan

Evaluation measures	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
Goal 1: Develop and maintain educational programs that produce highly qualified practitioners, educators, and researchers.		
Expand the number of students applying, matriculating, and graduating	SOPHAS, Banner SIS, Hobsons, Institutional Research	• SPH Student Services (daily responsibility for processing) • Director of Assessment (for yearly accreditation report)
Improve student success and satisfaction	WVU-SEI[1], Qualtrics-based surveys of students, alumni, and employers	• Digital Measures Administrator (SEIs) • SPH Student Services (surveys) • Director of Assessment (retrieves HSC graduate satisfaction survey)
Implement strategies to achieve a more diverse student population	Institutional Research, SOPHAS, Banner SIS, MAP[2]	• SPH Student Services (daily responsibility for processing) • Director of Assessment (race/ethnicity for yearly accreditation report)
Address the public health workforce needs of West Virginia	SPH Academic Affairs, Office of Public Health Practice and Workforce Development	• SPH Academic Affairs
Goal 2: Foster interdisciplinary research addressing health priorities and disparities that are relevant to West Virginia and the surrounding Appalachian Region.		
Expand our research portfolio	Digital measures, WVU+kc[3] (2016-2018)	• Office of Research (SPH) • Digital Measures Administrator
Expand interdisciplinary research collaborations and partnerships	Digital measures, REDcap[4] (2016-18)	• Digital Measures Administrator • Office of Research • HSC CTSI
Goal 3: Promote collaboration, community engagement, outreach, and service.		

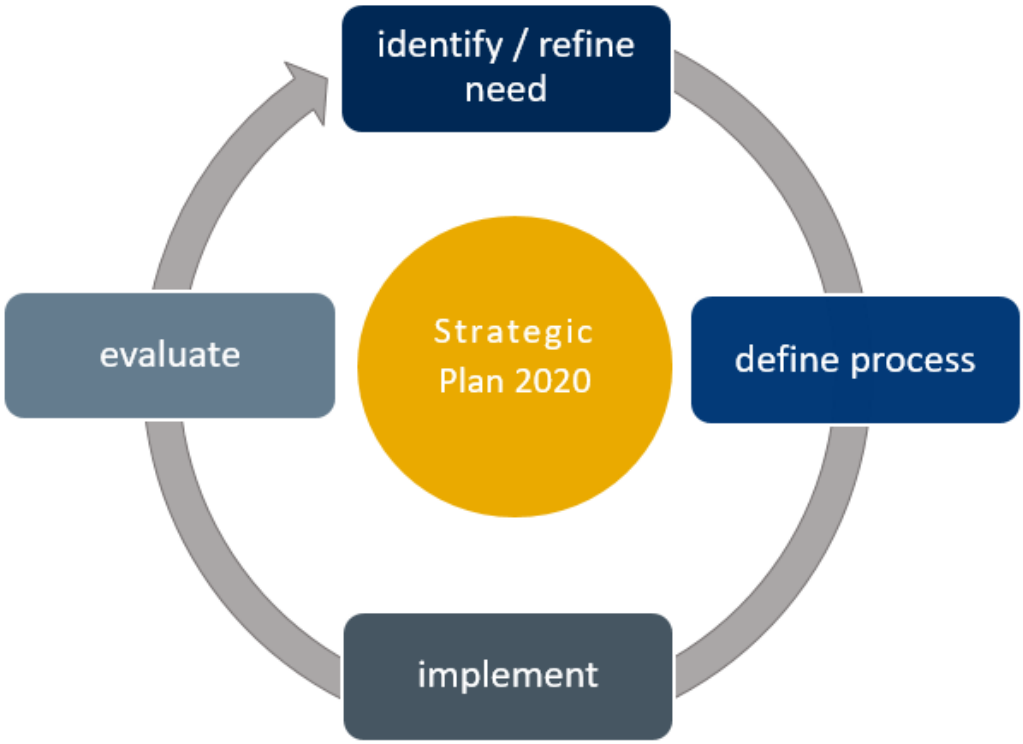
Support activities that outreach to the citizens of West Virginia and address community needs	Digital measures, SAPH database[5], HSTA database	• Digital Measures Administrator • SPH Student Services • SAPH • HSTA
Promote and support student involvement in outreach and community service activities	Digital measures, SAPH database[5], HSTA database	• Digital Measures Administrator • SPH Student Services • SAPH • HSTA
Goal 4: Build an organizational infrastructure and culture that fosters success.		
Expand, diversity, and enrich our workforce	Banner SIS, WVU Human Resources, Culture Survey	• SPH Academic Affairs • SPH Diversity Task Force
Improve the identifiable presence of the School of Public Health	Qualtrics surveys of student, staff, and faculty	• SPH Student Services
Maintain an open and inclusive governance structure that includes students, staff, and faculty	Qualtrics surveys of student, staff, and faculty	• Alumni Association surveys • SPH Student Services (graduate outcomes survey) • Director of Assessment (internal surveys, HSC graduate satisfaction survey)
Implement a school-wide process of continuous quality improvement	Annual Chair Report for MPH programs, Syllabi Audits, Committee Reports, Digital Measures, Productivity Reports, Annual Surveys, Student Focus Groups Data, Senn Delany Culture Profiles	• SPH Academic Affairs • Dean's Council • Program Directors • Chair Council • Core Accreditation & Compliance Team • Strategic Priorities Steering Committee • Evaluation Committee

[1]WVU Electronic Student Evaluations of Instruction
[2]The MAP System maintains all of the financial and human resource information for West Virginia University.
[3]WVU+kc (WVU Kuali Coeus) is an electronic research administration, web-based application that is being used by WVU for research compliance, administration of externally funded awards, and electronic funding notifications.
[4]REDcap is the data system used by the WVCTSI to track research collaborations and consultations.
[5]Participant data maintained by the School's student association

Table B5-1.2: Assessment Calendar					
Task	Fall	Spring	Summer	Source	Data
Student Competencies	Ongoing	Ongoing	Ongoing	SOLE (in development to meet changes in curriculum/ competencies)	*Responsibility: Program Directors, Director of Assessment, Faculty* Competency data collected and compiled for student, faculty, school reports
SPH Goals, Objectives, Aims	Ongoing	Ongoing	Ongoing	Qualtrics Banner	*Responsibility: Leadership* Ongoing data collection, cleaning, assessment and report generation to continuously measure outcomes compared to outlined objectives
Alumni Survey			Annual for fall and spring graduates	Qualtrics WVU Alumni Office	*Responsibility: Alumni Services Representative (collected from Alumni Office)* Annual assessment via web with telephone follow up to three years post-graduation of last degree. Includes employment and competency measures.
Office of Student Services Satisfaction w/Advising Survey eSEA Advising Evaluation Summary Report	Annual October			Being developed for MPH	*Responsibility: Student Services, Director of Assessment* Anonymous evaluation of satisfaction with the OSS. Sent to active students who received an OSS service.
Graduate Student Satisfaction Survey		Annual for all, active students		Qualtrics	*Responsibility: HSC Leadership* Anonymous, annual data solicited from all active SPH students, HSC-wide
Student Exit Interviews	Graduates	Graduates	Graduates	Qualtrics	*Responsibility: Student Services* Set as a requirement for degree conveyance in Degree Works. Survey data will be anonymized once completion is verified
Staff Satisfaction Surveys			Annual for all staff	Senn Delaney	Anonymous, annual data solicited from all SPH staff
Faculty Satisfaction Surveys			Annual for all faculty	Senn Delaney	*Responsibility: University-Wide Consultant* Anonymous, annual data solicited from all SPH faculty

Employer Surveys			Annual	Qualtrics	Anonymous, annual data collected from employers and field placement sites for SPH students inquiring about aggregate student experiences Responsibility: Director of Practice and Workforce Development Team
Faculty Reports (Promotion and Tenure, biosketch	As needed	Annual	As needed	Digital Measures	*Responsibility: Digital Measures Administrator, Chair of the P&T Committee* Reporting support for faculty for promotion and tenure annual reports, grant, Department Chairs who conduct annual review of their respective faculty.
support, CV data and generation)				Digital Measures	*Responsibility: Digital Measures Administrator* submission information including CVs and biosketches

2) Briefly describe how the chosen evaluation methods and measures track the school's progress in advancing the field of public health (including instruction, scholarship and service) and promoting student success.



The West Virginia University School of public health has transitioned from an accredited program housed as a unit within Community Medicine to a nationally recognized CEPH-accredited school in less than six (6) years. All impactful decisions in program and curricula design, academic instruction, advising, student recruitment, retention, career development have been data driven. Our data comes from traditional internal sources (i.e. surveys) but importantly, also includes ongoing and continuous feedback from external stakeholder involvement and relationships with significant health agency partners and the state's policy makers.

Employer-based, alumni, and student surveys are collected annually and have been utilized since 2014 to create the current infrastructure for the current integration of academic and student affairs. National data reflecting employment trends, ongoing working meetings with WVU Medicine, Department of Health and Human Resources (DHHR), the WV Bureau of Public Health, Kanawha Charleston Health Department, Monongalia County Health Department, and the CDC National Institutes of Health (NIOSH) have been utilized to shape course and curricula offerings. Specifically, working and consultation meetings with internal and external partners and national employment trend data resulted in the following program changes directly linked to impact in the public health workforce:

- Patient Navigation Area of Concentration (AOE) as part of the BSPH program (2016)

- Master in Health Administration (MHA), developed in direct response to a request by WVU Medicine to better train physicians for leadership roles)
- BS in Health Services in Management and Leadership (HSML) (launching Fall 2020).

Climate Surveys, Student Evaluation of Instruction (SEI's) and Academic Advising Surveys, are administered annually, through the Offices of Institutional Research, WVU Division of Talent and Culture, Office of Graduate Education and Life, WVU Undergraduate Studies, and Teaching and Learning Commons. Results from these surveys are utilized to inform teaching assignments, plan activities linked to our institutional values, and request resources and support for undergraduate and graduate program advising. Faculty and Staff satisfaction surveys are administered through and external consultant. Feedback is used to inform decisions for support and resources to enhance and/or maintain faculty and staff satisfaction, morale, and retention.

The School maintains an on-going feedback loop with information from data through several channels of communication and opportunities for open dialogue. Dean's Council, Council of Chairs, and Senior Leadership meetings are designed as forums to handle sensitive feedback due to both the nature of information and the time line necessary for a response. General information from data sources, including qualitative feedback, is provided as part of All Hands Meetings (Winnable Battles, Restructuring of MPH, Introducing Program Directors, Introducing MHA, NIOSH Scholar in Residence). Academic Affairs Committee Meetings, Departmental-level meetings, and Alumni and Leadership Council meetings.

3) Provide evidence of implementation of the plan described in Template B5-1. Evidence may include reports or data summaries prepared for review, minutes of meetings at which results were discussed, etc. Evidence must document examination of progress and impact on both public health as a field and student success.

The electronic resource file contains documentation of the various meetings and forums at which these evaluation methods and measures were discussed.

Please see Section B5 of the electronic resource file.

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

Strengths: Strong collaborative relationships with external partners have resulted in the School's responsiveness to needs designed to grow and enhance the current public health workforce. The University-based queries provide yearly feedback to inform program design.

Weaknesses: We have suffered from low-participation rates for school-wide surveys due to students' feelings of a lack of anonymity in responses and due in part to the uniqueness of the SPH in relation to the needs of the other four Health Sciences programs. The latter refers to questions on standardized institutional surveys that clearly are not relevant for students in our program. For example, the majority of questions on the HSC driven surveys reflect the other four (4) health professions students' study options, course sequencing, resident training, exam options, learning obstacles.

Plans: We have begun plans to make surveys more relevant to the day-to-day functions of the SPH, and have requested that questions be added to centrally administered surveys to capture the organizational make-up, culture, climate and environment of the School. We are awaiting

results/decisions regarding a climate survey to capture data on the School's values of diversity and inclusion, integrity, respect, civility, and environment for faculty, students, and staff.

B6. Use of Evaluation Data

The school engages in regular, substantive review of all evaluation findings, as well as strategic discussions about the implications of evaluation findings.

The school implements an explicit process for translating evaluation findings into programmatic plans and changes and provides evidence of changes implemented based on evaluation findings.

1) Provide two to four specific examples of programmatic changes undertaken in the last three years based on evaluation results. For each example, describe the specific evaluation finding and the groups or individuals responsible for determining the planned change, as well as identifying the change itself.

Example # 1-Integration of Academic and Student Affairs

Prior to Fall 2016 the Office of Student Affairs operated in a silo from Academic Affairs, with little structured input from departmental faculty, department chairs, or school leadership with the exception of the provision of routine updates and announcements. Exit surveys, advising satisfaction surveys, and qualitative findings from focus groups with faculty, staff, students, and alumni were used to determine dissatisfaction with the academic experience.

During the remainder of the 2016-2017 academic year, the newly appointed Associate Dean of Academic Affairs launched a deep dive into the management of the School's academic process and procedures, student affairs staff's job performance, position appropriateness, and job readiness. During this same period, identification of anticipated changes in CEPH criteria and readiness for articulating those changes within the Office of Student Affairs was determined. Finally, a significant period was devoted to a better comprehension of the delineation of duties in the Office of Academic and Student Affairs.

To facilitate open dialogue in a safe space with the staff in the Office of Student Affairs and academic leaders an external consultant was engaged. The findings from the Office of Student Affairs and leaders was delivered to the Dean and the Dean's Council. Among the recommendation from the staff retreat was the immediate change to the infrastructure of academic and student affairs, including reporting lines, clearer expectations in job performance, and the request for an MPH and PhD Program Director. Additionally, the Dean invited leaders from the academic and student affairs offices, including department chairs and assistant Deans, to participate in a culture shaping retreat led by a nationally consultants which required participation over a 6-month period. Data from that retreat revealed a common desire to prioritize students and their academic experience at WVU SPH. Retreat experience and findings were discussed in Academic Affairs Committee and Dean's Council as part of debriefing and future plans to foster excellence in the student experience.

Program Directors were appointed in 2017 and each launched a substantive review of the MPH and PhD program, respectively. Proposed changes to PhD and MPH advising, and the infrastructure for ensuring a more satisfying academic experience were vetted as part of the Academic Affairs Committees, Dean's Council and individual Chair meetings. Dr. Mike Mann, Director of the MPH from 2016 to 2018, analyzed the structures in place prior to the suggested changes and produced a systems change document to guide the implementation of the desired direction. The Office of Academic and Student Affairs was created to model the suggested system changes after a series of open forums and meetings with all constituent groups. These systematic changes also resulted in the following:

- Appointment of the Assistant Dean of Public Health Practice
- Revisions to the job expectations for the Director of Practice Based Experience

- Creation of an MPH Advisor role for a long-time staff member in the Office of Student Services
- Revisions to the mandatory Student Orientation for all incoming students
- Hiring an experienced admissions recruiter
- Creation of a committee focused on student retention and success
- Training for Department Administrative Assistants

In summary, changes to the structure of academic and student affairs were made after a review of student and alumni surveys, qualitative data from student forums, two academic and student affairs retreats, job descriptions for student affairs staff, and a systems review of infrastructure needs that better aligned with desired changes in program delivery and advising support. The revisions to our academic structure provide the basis for two of our four current strategic visioning priorities aligned with goals for Student Centric and Inspiring Education. Students who entered the program in fall 2018 will be the first cohort to report on the benefit of the substantial infrastructure changes in the curricula and advising. However early indicators from annual surveys, individual advising with MPH, MS, and PhD students have been overwhelming positive. Undergraduates are new to our program and are having positive experiences with academic instruction and advising, however, a survey from the Undergraduate Advising Office suggests that we have additional opportunities for improvement. The Assistant Dean of Undergraduate Studies, respective program directors and the Senior Associate Dean for Academic, Faculty, and Student Affairs, conducts programs reviews annually. We utilized regularly planned advising workshops and retreats to review data and make changes as needed. (evidence can be viewed in section B6, Example 1 folder, of the ERF)

Example #2-Patient Navigator Area of Emphasis (AOE)

The Bachelor's in Public Health degree was launched in 2016 with two primary focus areas, 1) the science of public health and 2) community health engagement. The idea for developing a Patient Navigator (PN) program was initially proposed by the Vice President of Quality and Patient Safety at WVU Hospitals, who saw the looming need for PNs at WVU Hospitals. At an October 1, 2016 planning meeting attended by representatives of both WVU Hospitals in Morgantown and the Eastern Division, the Associate Vice President and Dean of the School of Medicine-Eastern Division, indicated that it is "particularly difficult to fit this training into other curricula, such as for registered nurses and social workers." The Medical Director of Performance Improvement at WVU Health Systems agreed saying "the best role for these graduates would be as team extenders, expanding the reach of the clinically trained members of the team". The Vice President of Quality and Patient Safety also indicated that "health insurers are starting to work in this care coordinator/navigation field; another possible employer for BS in Public Health graduates as most of these coordinators/navigators are currently registered nurses, who could be better utilized elsewhere in the health care system."

Based on this program need and the School's commitment to ensuring long-term careers for graduates from our program, the Dean convened meetings with the Assistant Dean for Undergraduate Studies and senior academic leadership to brainstorm regarding approaches to adding the Patient Navigator AOE. The first draft of the proposed program in 2016 has benefitted from financial resources from the Dean's office, curricula changes in line with the state of the field, changes in program coordination to better align those with combined public health and hospital/healthcare experience, reduction of redundancy in course offerings, and a faculty-based program coordinator. We now have a fully articulated program and graduated----- students since who have all been placed in jobs. Through

alumni interviews we have learned that the Patient Navigation skill sets have translated well enough for students to be hired as data analysts and community health workers.

Faculty with regular teaching assignments in our program support the Patient Navigator AOE. Other support for the program comes from the following highlighted examples:

- A faculty member in the Department of Social and Behavioral Sciences, who is a registered nurse, coordinates this Area of Emphasis, teaches 2 – 3 of the courses and coordinates the Patient Navigation Experiential Agency Rotations.
- Either full-time or adjunct faculty in the Department of Health, Policy, Management and Leadership teaches two courses.
- A faculty researcher in the Mary Babb Cancer Center at WVU with a 20% teaching assignment in the SPH, specializes in patient navigation and cancer survivorship, teaches one of the courses, and will have an ongoing relationship with the program coordinator.

In summary, the School responds to requests from its collaborative partners and stakeholders to make curriculum decisions. Those strategic discussions sometimes involve revisions and/or additions to the curriculum. The full articulation and development of programs relies heavily on feedback and information gathered as part of program reviews, Student Evaluation of Instruction (SEI's), strategic execution of resources (FTE's, adjunct appointments, dual appointments, reassignment of duties), and data that supports career placement and success. (evidence can be viewed in section B6, Example 2, of the ERF)

2020 Strategic Plan Goals met by the two examples above are provided in the table.

Table B6-1: Programmatic Change Related to Our 2020 Strategic Plan Goals			
Goal 1: Develop and maintain educational programs that produce highly qualified practitioners, educators, and researcher.			
		Integration of Academic and Student Affairs	UG Patient Navigator Area of Emphasis
	Objective 1.1: Recruit and retain the highest quality students for all degree programs	x	x
	Objective 1.2: Prepare students to confront the public health challenges of the 21st century	x	x
	Objective 1.3: Strengthen the public health workforce of West Virginia		x
Goal 2: Foster interdisciplinary research addressing health priorities and disparities that are relevant to West Virginia and the surrounding Appalachian region.			
		Student Affairs	Undergraduate Program
	Objective 2.1: Increase interdisciplinary research collaborations and partnerships		
	Objective 2.2: Expand our research portfolio to produce new knowledge about the determinants of disease and injury, causes of health disparities, and effective interventions for prevention and treatment	x	

	Objective 2.3: Provide statewide leadership in public health research		
	Objective 2.4: Promote student participation in research initiatives	X	X
Goal 3: Promote collaboration, community engagement, outreach, and service			
		Student Affairs	Undergraduate Program
	Objective 3.1: Increase faculty engagement with community organizations, public health agencies and professional associations		x
	Objective 3.2: Provide information, technical assistance, and evidence-based guidance to the public, and to public and private organizations		
	Objective 3.3: Promote and support student engagement in outreach and community service activities	X	X
Goal 4: Build an organizational infrastructure and culture that fosters success.			
		Student Affairs	Undergraduate Program
	Objective 4.1: Recruit and retain a high quality and diverse workforce		
	Objective 4.2: Establish an identifiable presence for the School of Public Health		x
	Objective 4.3: Provide effective research support services to faculty		
	Objective 4.4: Provide an effective information technology infrastructure that supports all other goals		
	Objective 4.5: Maintain an open and inclusive governance structure that includes students, staff, and faculty	X	
	Objective 4.6: Implement a school-wide process of Continuous Quality Improvement	X	

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

Strengths*:* We have a comprehensive infrastructure in place to inform our day-to-day operations as well as strategic initiatives. We have been able to utilize a variety of quantitative and qualitative data sources to make informed decisions.

Weaknesses: None noted

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:

The HSC maintains a comprehensive budget planning process that incorporates unit level budget development for a given fiscal year beginning in the preceding year. Individual units/schools develop revenue and expense budget requests for the upcoming fiscal year in line with the guidelines set forth by the WVU University Planning Committee (UPC). In part, the University Planning Committee consists of the University Provost & Vice President of Academic Affairs, Vice President and Chief Financial Officer, Vice President Health Sciences Center, Vice President Research Office, and Associate Vice President Finance.

Operating units/schools within the HSC receive a central allocation of funds for salary and operating expenses. Central revenues consist of appropriations from the State of West Virginia, University tuition and fees, and indirect cost recovery. Central allocations are based on historical allocations, tuition revenue, and also consider current and future changes and requests. University and HSC financial performance also affects fund allocations. In periods of declining enrollment, the University or HSC may experience a need to decrease in revenue. That decrease will be allocated out to all schools within HSC. Alternatively, allocations may be increased should the University or HSC experience positive financial performance. The central allocation expires at the end of each fiscal year and those funds to not roll over to the next fiscal year. Exceptions can be made, however, whereby HSC will allow a carryover of unexpended funds, as needed, on a case-by-case basis.

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

Faculty salaries are funded through a combination of the HSC central allocation, grants and contracts, and endowment funds. Tenure-track faculty in twelve month positions are expected to support at least 25% of their annual salary with extramural funding by the beginning of their fourth year of appointment, with the potential to further supplement their salary through the Faculty Research Incentive plan. Further, they are expected to show progress toward the 25% funding throughout appointment years one through three. Research track faculty in four Research Centers of the School are expected to fully fund all research efforts via extramural funds.

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.

Additional faculty and staff needs are generally communicated to the Dean, Senior Associate Dean for Administration or Chief of Staff. Funds needed for additional positions are discussed with the Senior Business Planning Officer and available fund balances are discussed. If central funds are not available, SPH can request additional funding from HSC. Approvals for additional funding are made on a case-by-case basis. Also, non-central funds are used to support additional, necessary positions.

c) Describe how the school funds the following:

a. operational costs (schools define “operational” in their own contexts; definition must be included in response)

Operational costs are those expenses necessary to carry out the daily operations of the School, excluding salary and fringe expense. Examples include supplies, travel, hospitality, minor equipment, marketing, and maintenance. Each of the five departments, Central Administration, Academic and Student Affairs, and other administrative offices, each receive an operating budget allocation from the HSC central allocation. Departmental operating budgets are based on historical trends, while also considering current and future departmental changes. Non-central funding, such as revenues from tuition allocations and professional service agreements, may also be used. Operating costs are also supported by external funding, grants and contracts, awarded for specific projects and budgeted within the SPH for the duration of the projects. Operating costs can also be supported with the Chair’s Tax funds that each of the five departments have and with the individual faculty incentive funds that faculty have the opportunity to earn. Faculty have the opportunity to participate in the grant/external funding incentive program. Faculty are given the option to receive the incentive funds directly in their paychecks, deposit the funds in non-central funds for other uses, or a combination of both of these options. Incentive funds deposited in non-central funds are net of a taxes applied and distributed to the Dean’s tax fund and the appropriate departmental chair’s tax funds. Finally, as appropriate and in accordance with donor restrictions, WVU Foundation donor funds may be used for operating expenses.

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

The SPH uses a portion of the online University tuition (Academic Innovation) that is received non-centrally to fund student scholarships. In addition, The SPH also receives gifts, as established through the West Virginia University Foundation, to assist with support of the School, including student scholarships, student travel, memberships, and other needed expenses. The SPH has a director of development who works with donors and alumni to solicit donations. Student Affairs uses a portion of their central budget allocation to support student travel, the Student Association of Public Health (SAPH), and other general student expenses. External grant and contract funding is also used to support student workers, travel, and other expenses, providing the expense is approved by the sponsor, written into the award, appropriate per University policies and follows Uniform Guidance.

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

Faculty development expenses may be supported with the annual central operating budget allocations that each of the five departments receive. Additionally, faculty have the opportunity to participate in the grant/external funding incentive program. Faculty are given the option to receive the incentive funds directly in their paychecks, deposit the funds in non-central funds for other uses, or a combination of both of these options. Incentive funds deposited in non-central funds may be used for faculty development expenses. Next, as part of the recruitment process, faculty may receive a start-up package. Amounts vary, but may be used to support professional development expenses. Finally, faculty may use external grant and contract

funding to support development expenses, providing the expense is approved by the sponsor, written into the award, appropriate per University policies and follows Uniform Guidance.

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 receives a central allocation each fiscal year and in general, the allocation not used reverts back to HSC after the close of the year. Exceptions can be made, however, whereby HSC will allow a carryover of unexpended funds, as needed, on a case-by-case basis. The School has, and will continue to receive, strong HSC financial support and assistance to fulfill the critical mission of the School.

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.

University and college tuition paid by the students is received by HSC and allocated, in part, to the five HSC schools as part of their annual central allocation. The SPH receives 40% of University tuition for online courses (Academic Innovation) directly in a non-central fund. The other 60% of University tuition for online courses is included in central allocation that the School receives. SPH receives 100% of University tuition for in-person courses. SPH receives 85% of college tuition in the central allocation. The other 15% of the college tuition is retained by HSC.

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.

Indirect cost recoveries are not received by or allocated back to the SPH, or any other HSC school, but rather are retained by HSC. HSC retains these indirect costs as the schools are not charged space costs, utilities, and other centrally supported services such as information technology, maintenance, custodial, security, etc.

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.

Table C1-1: Sources of Funds and Expenditures by Major Category, 2015 to 2019					
	2015	2016	2017	2018	2019
Source of Funds					
Tuition & Fees	11,155	77,890	69,811	89,075	80,115
Self-Generating	917,935	1,210,159	1,305,384	2,871,872	2,210,102
Grants/Contracts	2,751,867	5,251,281	5,344,859	5,757,490	5,318,896
HSC Allocation*	6,790,536	7,995,865	7,179,303	7,499,996	7,823,872
Office of Research & Graduate Education	262,500	262,500	262,500	262,500	262,500
Endowment	99,561	92,115	421,109	283,292	186,044
Gifts	216,135	189,109	115,624	515,743	278,949
Other (explain)					
Other (explain)					
Total	11,049,689	15,078,918	14,698,590	17,279,968	16,160,478
Expenditures					
Faculty Salaries & Benefits	4,903,551	5,777,525	6,031,618	6,424,143	6,338,018
Staff Salaries & Benefits	2,467,108	3,265,776	2,795,136	3,454,079	4,069,289
Operations	2,211,229	3,561,562	2,645,668	3,237,908	2,813,588
Travel	350,013	363,580	243,106	318,916	293,257
Student Support	1,194,102	1,299,495	1,130,561	1,283,485	324,419
Other (F&A)	567,720	672,484	948,881	985,410	955,036
Other (investment fees)					
Other (explain)					
Total	11,693,723	14,940,423	13,794,970	15,703,941	14,793,607
Net Income	(644,034)	138,495	903,620	1,576,027	1,366,871

*Indirect cost recovery is included in HSC allocation as previously described.

** WVU Foundation moved to a new reporting system and only FY16 and newer data available. FY15 data requested and will update once received.

Row definitions:

- Tuition and Fees includes the portion of academic innovation (online) tuition received in non-central accounts. It also includes the tuition transfer for the SHED program and college tuition for the MS in Health Sciences.
- State Appropriated Revenue includes state appropriations to assist in the development of the SPH.
- Self-Generating represents fee-for-service contracts.
- Grants/Contracts revenue is counted in the year the funds were expended.
- HSC Allocation is determined centrally by HSC Finance.
- Office of Research & Graduate Education is provided by the HSC ORGE specifically for PhD student support.
- Endowment/Other Income represents investment return on endowments and dues/other fees housed in the WVU Foundation for the benefit of SPH.
- Gifts represent spendable donations housed in the WVU Foundation designated to benefit SPH.

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

Strengths:

- The SPH continues to receive strong institutional support and funding from the HSC.
- The SPH added an undergraduate program in spring of 2016. Since that time, enrollment has steadily increased each year, which has increased tuition revenue.
- A percentage of online University tuition is received non-centrally, meaning that those funds roll over each year and do not expire as centrally allocated funds do, and online University tuition has steadily increased each year through FY19. Additionally, through a combination of the central allocation and a non-central transfer, the SPH receives 100% of University tuition.
- To promote retention and success, enhance research, instruction, training, and public service, the School offers a faculty incentive pay program (FIPP). Faculty who earn these incentive payments have the option to enhance their salary, transfer the incentives to a non-central incentive fund to support expenses, or a combination of both.
- As part of the recruitment process, SPH faculty may be offered a start-up package. These funds are attractive incoming faculty and support their efforts in acquiring external funding and other program start-up costs.

Weaknesses:

- Although the SPH has increased gifts and endowments since the School was established in 2012, the SPH continues to build its alumni base and reputation, thus further increasing gifts and endowments.

Plans:

- The Dean is working with the Director of Development to increase development efforts and gifts. Further, with time, the alumni base will continue to grow, as should gifts and endowments.

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.

Table C2-1.1: Adequacy of the School's Instructional Faculty (MPH, MS and PhD)						
	MPH			MS	PhD	ADDITIONAL FACULTY+
CONCENTRATION	PIF 1*	PIF 2*	FACULTY 3^	PIF 4*	PIF 5*	
Biostatistics MPH, MS, PhD	George A Kelley 1.0	Sijin Wen 1.0	Snehalata Huzurbazar 1.0	Christa Lilly 1.0	Not Yet Assigned	PIF: 2 , Non-PIF: 1
Epidemiology MPH, PhD	Thomas Hulsey 1.0	Karen E Innes 1.0	Ruchi Bhandari 1.0	N/A	Sarah S Knox 1.0	PIF: 1 , Non-PIF: 7
Health Policy, Management and Leadership MPH	Lindsay D Allen 1.0	Thomas K Bias 1.0	Lauri A Andress 1.0	N/A	N/A	PIF: 3 , Non-PIF: 4
Occupational and Environmental Health Sciences MPH, PhD	Travis Knuckles 1.0	Michael McCawley 1.0	Lan Guo 1.0	N/A	Weimin Gao 1.0	PIF: 0, Non-PIF: 3
Social and Behavioral Sciences MPH, PhD	Christiaan Abildso 1.0	Danielle Davidov 1.0	Ranjita Misra 1.0	N/A	Geri Anne Dino 1.0	PIF: 5 , Non-PIF: 5

Table C2-1.2: Adequacy of the School's Instructional Faculty (BS)				
	BS			ADDITIONAL FACULTY+
CONCENTRATION	PIF 1*	PIF 2*	FACULTY 3^	
Public Health BS	Toni Morris 1.0	Elizabeth Claydon 1.0	Greg Hand 1.0	PIF: 7, Non-PIF: 4

Table C2-1.3: Total Faculty Represented in Tables C2-1.1 and C2-1.2		
TOTALS:	Named PIF	22
	Total PIF	40
	Non-PIF	24

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 FTE status is determined by calculating the percentage of time the faculty member spends in a 40 hour work week doing what they are being measured to do. For example, if they teach one day per week then they are considered 20% teaching.

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

We removed the BS program from the main table to better articulate the three required PIF faculty.

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

Academic Year 2018-19

On page, 64 of this document we described the integration of academic and student affairs, and provide evidence of qualitative and quantitative data utilized to inform this change. Academic Advising was a critical part of this transformation. Specifically, student feedback on their experiences with advising over a 3-year period inspired the centralizing of advising services. We revised a Student Affairs staff role to accommodate this need. Since 2016, Ms. Leah Adkins has provided comprehensive advising for all graduate students in consultation with Department Chairs and the respective program directors for the MPH and PhD. Ms. Adkins completes a formal Plan of Study for each student, which informs the trajectory of course choices, degree requirements, and milestones for graduation (see sample plan in section C2 of the ERF).

Undergraduate General Advising for AY 2018-19			
Degree	Total	Professional Staff	UG Dean
Bachelor's	357	274	83

General advising for AY 2018-19	
Degree level	Total
Master's	43
Doctoral	25

Career Counseling for AY 2018-19	
Degree level	Number of Students
Bachelor's	31
Master's	25
Doctoral	5

Advising in MPH integrative experience for AY 2018-19		
Average	Min	Max
4	2	7
Supervision/Advising of bachelor's cumulative or experiential activity for AY 2018-19		
Total	Fall	Spring
62	16	46

Mentoring/primary advising on thesis, dissertation or DrPH integrative project for AY 2018-19			
Degree	EPID	OEHS	SBHS
DrPH	n/a	n/a	n/a
PhD	4	6	2
Master's other than MPH	n/a	n/a	n/a

These tables comply with the requested information in the format provided. However, the following description of advising is more accurate for the WVU SPH.

Bachelor of Science Public Health Advising Ratios

All students (including special cases such as athletes, VA benefits, dual degree, double major, or those struggling academically) are advised by the staff undergraduate academic advisor, Mr. Scott Mahaney at a ratio of 1:175

As a retention effort, Ms. Sarah Opatz handles all internal transfers (students who want to switch majors to public health). She recruits internal transfer students in a variety of ways on campus, maintains communication records and handles follow-up, and hosts three information sessions per semester for students to learn more about the field and the major. Once students meet with her or attend an information session, Ms. Opatz refers the students to Mr. Mahaney for advising sessions where they are officially matriculated to the public health program. Ms. Opatz currently has an annual caseload ratio of 1:52.

The Assistant Dean and Program Director of Undergraduate Programs, supervises the advising and retention efforts of Mr. Mahaney and Ms. Opatz.

Master of Science Biostatistics & Master of Public Health Advising

In the MPH program, students are advised by cohort. The current advising ratio for AY 2019/2020 is 1:40 . In addition to group and individual advising by Dr. Linda A. Alexander, Interim Director of the MPH Program, these students are assigned a primary staff advisor, Ms. Leah Adkins, Senior Program Coordinator in the Office of Student Services. During advising sessions students complete and co-sign a plan of study (example in section C2 of the ERF). In 2018, the Office of Graduate Life and Education flagged our Plans of Study (POS) as outstanding, and Ms. Leah Adkins was asked to train other units.

MS Biostatistics students are individually advised by the Associate Dean for Professional Programs, Dr. Erik Carlton in consultation from Biostatistics Departmental faculty. These students also meet with Ms. Adkins from the Office of Student Services to formalize and co-sign their plans of study. The current ratio for this academic year is 1:9

Doctor of Philosophy Public Health Sciences

The three department representatives from the programs that offer a concentration advise doctoral students. Departmental academic advisors serve as faculty mentors for PhD students during the first two years of their coursework. The Director of the PhD Programs, Dr. Alfgeir Kristjansson, advises students individually. Two mandatory advising sessions are held each academic year. WVU SPH doctoral students embrace the Biomedical Sciences model. Students in this program are given an Individualized Development Plan (IDP). Mentors begin identifying potential career paths for students no later than their second year when students are transitioned to a dissertation or research mentor.

Career Development and Student Success

In July of 2017, the SPH appointed its first Director of Career Services. Mr. Scot McIntosh's formal title is Director of Career Development and Student Success, and he has served in this capacity for the last two years. Mr. McIntosh serves students across all SPH degree programs (undergrad and graduate). His primary foci include:

- Providing individual career advising and coaching sessions
- Connecting with alumni to integrate them into current student activities
- Providing guidance for students as the Staff Advisor for the Student Association of Public Health (SAPH)
- Guest lecturing in SPH classes about Public Health Career Pathways
- Tracking graduate outcomes data for our accrediting body, CEPH
- Developing SPH specific content for our students for the SPH website, https://publichealth.hsc.wvu.edu/students/student-resources/career-development/.

In just over 2 years, Mr. McIntosh has had at least one individual career advising session with 163 SPH students. Additionally, he developed and teaches a credit bearing career based class (PUBH 200 – Intro to Public Health Careers & Information) that is offered every semester. As of fall 2019, over 100 SPH undergraduates have completed the course. He has guest lectured in multiple SPH classes, has integrated alumni guest speakers into monthly SAPH meetings (approximately 30 members attend each meeting) and hosted several career panels per semester in his undergraduate

career class. Mr. McIntosh has built out a section of the SPH website with career preparation materials (14 handouts) and a job board, https://publichealth.hsc.wvu.edu/students/student-resources/career-development/jobs/ for public health students with over 350 public health job postings.

The decision to appoint staff and departmental advisors was based on significant qualitative and quantitative feedback over the course of a four-year period. It was determined in 2017 that our advising needs would be best served by those with the titles and roles in the narrative descriptions.

Please see section C2 of the ERF for undergraduate and graduate student satisfaction with advising surveys.

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

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

Rather than asking questions regarding class size on individual SEIs where a faculty member can be unfairly judged for circumstances they do not control, we are working with the Office of Research and Graduate Education to include questions about class size and the impact on learning in the Graduate Student Satisfaction Survey.

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

The Office of Research and Graduate Education at the Health Sciences Center annually surveys all graduate students that ask this question along with the university-wide student evaluation of instruction.

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

We do not currently collect data specific to the availability of student perceptions of class size and availability of faculty. However, during our Program Directors' formal meetings with students for each of our public health degrees and concentrations there has been no feedback, formal or otherwise, as to students' dissatisfaction with faculty availability or class size during this last academic year.

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

Strengths: Our students are incredible vocal and based on those factors they believe would enhance their academic experience (scholarships for MPH students, parking, private cubicles for studying) we feel certain that the perception of a lack of faculty availability or dissatisfaction of class size would have been articulated during many face-to-face opportunities with program directors, the Office of Academic Affairs, Academic Advisor, and via the Student Association. We have interpreted their lack of a voice around these two features of learning as a positive. However, please note in our plans below that will

add questions as part of the Student Evaluation of Instruction (SEI's) to get at these two queries in a more formal and substantive way.

Weaknesses: Not everyone completes a feedback form or Student Evaluation.

Plans: Will work with the unit that implements the Student Evaluation Surveys to include the missing questions. Which will provide us with the needed data to track trends and progress.

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.

The School has outstanding support to fulfill its teaching, research, and service missions. Departmental Administrators provide critical support to departmental faculty in their day-to-day roles as instructors and help maintain the documentation needed for continuous quality improvement through meeting minutes, communication, process, and procedures. Trained staff provide assistance with pre and post awards in response to grant applications to ensure timeliness and compliance as part of institutional research priorities. A team of additional expert staff in the Dean's Administrative Suite contributes daily assistance with finance, communication, and marketing and information technology. Talented recruitment, admissions, career counseling, and practice staff are relied upon daily to support the academic enterprise. The School also benefits from an assessment specialist whose full-time staff position is devoted to the ensuring the appropriate mechanisms for competencies and evaluation are in place.

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.

Table C3-1: Staff Support

Role/function	FTE
Academic Affairs	6
Accreditation and Evaluation	1
Admissions	2
Career Services	1
Development	1
Finance and Administration	4
Institutional Research	2
Information Technology	0.9
Marketing and Communication	1
Other	17
Public Health Practice and Training	1
Research Administration - Post Award	10
Research Administration - Pre Award	1
Student Affairs	2

The School's Information Technologist is shared position with the Health Sciences Center Department of Information Technology Services. This person works for the HSC at 0.1 FTE and for the School at 0.9 FTE.

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

Teaching Assistants are among the most invaluable staff because they support faculty with large courses, those who have significant research goals as part of their portfolio, and adjunct faculty main content expertise but whom are unfamiliar with our internal course management system (SOLE). The School also employs 32 student workers, who work up to 20 hours per week supporting faculty research projects. Supervised by faculty, student workers provide assistance with data collection and analysis, literature searches and reviews, and manuscript drafting and editing.

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 staff and other personnel are sufficient to support the school. A total of 66 FTEs support the 55 faculty, for a ration of 6:5 staff members to faculty members.

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

Strengths: WVUSPH has more than adequate support to maintain its vision, mission, and goals.

Weaknesses: There are no current weaknesses identified in the current self-study

Plans: None at the present time

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.)

The SPH is located within the WVU Health Sciences Center (HSC), a building with over one million square feet of space. The HSC houses the Schools of Public Health, Dentistry, Medicine, Nursing and Pharmacy as well as associated dental and medical clinics. The majority of office and meeting space dedicated to the School is located on the third floor of the HSC, South side. However, several portions of the school are located in varying areas. Classroom space is shared by all schools in the HSC and scheduled by request. Adequate space is available to fulfill the mission of the SPH; however, contiguous space in the HSC would be advantageous.

The SPH holds a footprint of 19,700 square feet which includes 91 offices, six conference rooms, two science labs, and three kitchen areas for faculty, staff, and students. Included in the office space are areas specifically assigned for SPH students to study and/or work in addition to multiple areas from which they are free to choose throughout the HSC. Auditorium style as well as smaller classrooms are available as needed and reserved via a centralized University-wide scheduling system.

As the University constructs a new building or remodels a current building, they are standardizing space, which will help ensure consistency of office size among faculty and staff.

- Faculty office space

Faculty occupy 51 offices totaling 7,386 square feet. All full-time faculty have private offices. All faculty offices have wired network and Wi-Fi capabilities and are equipped to support the work of the individual faculty member. Faculty offices are organized typically by academic and research focus, allowing faculty the opportunity to regularly interact with other faculty who have similar interests.

- Staff office space

Staff occupy 37 offices totaling 6,187 square feet. All staff have either a private office or a workstation in a multi-person room. All staff offices have wired network and Wi-Fi capabilities and are equipped to support the work requirements of each staff member. SPH staff are typically grouped in teams within buildings, allowing faculty, staff and students the opportunity to locate needed support staff in a location based on function.

- Classrooms

Classrooms in the HSC are shared with the five schools that reside in the building, Dentistry, Medicine, Nursing, Pharmacy, and Public Health. The University uses scheduling software, 25Live, to request/reserve rooms for instruction, meetings, and events. Rooms vary in size and style, from large auditoriums to small conference rooms. Classroom technology at the HSC is equipped with multiple technologies to enhance curriculum delivery.

- Shared student space

Students currently occupy 2,450 square feet of space to study and work. In the 2016-17 academic year, the SPH installed a 19 station student computer lab that is available to all public health students. The computer lab is open and available from 8 am to 5 pm Monday through Friday and follows the WVU holiday calendar. Each computer is equipped with software to conduct research and complete homework assignments.

In addition to the space within the SPH, students have access to 27 study rooms and 7 lounge areas in the Health Sciences Center.

- Laboratories, if applicable to public health degree school offerings

The SPH currently uses two science laboratories. The first laboratory, is shared by two faculty members and the second laboratory is used by the Chair of Occupational and Environmental Health Sciences. If we recruit a new faculty member that will require the use of a laboratory, we have the ability to acquire the needed space within the HSC footprint.

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

Since our last site visit, we continue making progress to have contiguous space in the Health Sciences Center.

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

Strengths: Space is designated based on student needs. If a need arises that has not been addressed, it will typically get escalated. It is advantageous to have students serving on select committees regarding space and other resources – so they can voice their opinions/concerns and be a part of the decision-making process/solution.

Weaknesses: SPH is in competition with four other schools in the building regarding space. Overall, space needs are growing and the available space within the HSC is shrinking.

Plans: Continue to work with HSC administration to plan for contiguous space for all five SPH departments. Conduct a space audit to assess if the SPH can more efficiently utilize existing assigned space.

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

WVU Library

The School of Public Health (SPH) has access to an abundance of information resources and services available via WVU Libraries. The WVU Libraries encompasses seven libraries: the Downtown Campus Library, Evansdale Library, Health Sciences Library (Morgantown), Law Library, Health Sciences Library (Charleston), Mary F. Shipper Library at Potomac State College, Beckley Library at WVU Institute of Technology, and West Virginia and Regional History Center. The collections include more than 1.8 million books, 400,000 eBooks, and 117,000 e-Journals made available through the https://www.libraries.wvu.edu/ website. Older books and serials are housed in a climate-controlled offsite depository, and digitally scanned chapters and/or articles from these materials are delivered promptly upon request.

HSC Library

The SPH is located on the Health Sciences campus and in the same building as the WVU Health Sciences Library (WVU HSL), in the Robert C. Byrd Health Sciences Center (HSC). WVU HSL has a wide selection of resources to support graduate programs in public health. Students, faculty and staff have access to nearly 5,000 e-journals in the health sciences from computers (including pcs, laptops, tablets) and/or smart phones either on campus or at remote locations. There are more than 81,000 books to support the instructional, clinical, and research initiatives of the HSC. WVU HSL currently provides access to approximately 960 e-journals specifically relating to public health topics. These journals include 90% of the public health titles analyzed for Journal Citation Reports. Our library subscribes to a wide range of bibliographic databases ranging from broad coverage like PubMed, Medline, Scopus, and Web of Science to more focused resources like Statistical Abstracts of the United States. WVU Libraries uses a link resolving service that improves access to research using licensed databases on the Internet that describe journal articles, – Find it @ WVU http://ad4tq3gq5x.search.serialssolutions.com/?SS_Page=refiner&SS_RefinerEditable=yes. Clicking on this link (from these databases, accessed through the libraries website), displays a list of all possible full-text digital options and facilitates the completion of electronic document delivery requests in PDF documents when journal articles are not available locally.

HSC Library Acquisitions

The WVU Health Sciences book collection is ever increasing and incorporating new books on diverse topics related to the highly interdisciplinary field of public health. Librarians regularly order new books and consider acquiring requests for specific books or journal subscriptions. The

document delivery staff can rapidly locate and deliver materials from other WVU Libraries, PALCI Consortium (NJ, PA, and WV libraries); and libraries in the entire United States and international locations.

HSC Library Assistance

The WVU HSL offers extensive reference assistance for performing systematic reviews, formulating online search strategies, conducting database searches, validating citations, locating materials not owned by this library, or any other research assistance that might be needed. Librarians offer hands-on instruction in PubMed, RefWorks, and EndNote to individuals and groups. They also offer customized training when requested for project teams. Librarians develop research guides on a variety of topics and for specific classes. Descriptions of the public health research guides and the WVU HSL available at

https://libguides.wvu.edu/sb.php?subject_id=83544.

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

Student Access to Hardware

The SPH has a graduate student computer lab with 19 desktops available for SPH graduate students. The lab is located within the SPH office spaces and near the offices of SPH Information Technology Services, Academic Affairs and Student Services. It is open 8am-5pm Monday through Friday and students can obtain swipe card access to work in the lab after hours or on weekends upon request. The computers are equipped with all the software required for Public Health courses and degree programs. Students also have access to the WVU Libraries rooms and resources (https://library.wvu.edu/services/computers-and-laptops). There are 25 study rooms at the Downtown Campus Library, 31 available at the Evansdale Campus Library and 10 available at the HSC Library. Students can book the study rooms online at https://wvu.libcal.com/spaces. There are over 425 computers in the WVU Libraries system that are available for Public Health student use. The Downtown Campus Library has 222 Windows desktop computers (including study room computers), 30 classroom desktops available when class is not in session, 60 laptops, 33 Apple desktops and 30 Apple laptops. The Evansdale Library has 52 public workstations, 66 classroom desktops available when class is not in session, 25 laptops, 6 Apple desktops and 25 Apple laptops. The Health Sciences Library, located within the same building as SPH offices, has 55 public desktops available in the library's commons area, 8 desktops in study rooms, and 74 classroom desktops available when class is not in session.

Student Access to Software

All WVU students have an account they use to sign into online WVU resources as well as computers in labs, classrooms and study rooms. All students also have a Microsoft account and a Google account they access with the same username and password. The Google account is referred to as their MIX (Mountaineer Information Express) account and it gives them access to G Suite Applications including Gmail, Google Drive, Docs, Sheets, Slides and Calendar among other applications. They also have 25 GB of free storage available in Google Drive. WVU also provides Microsoft Office free to all current students via the Microsoft account. Microsoft Office includes Outlook, Word, Excel, PowerPoint and Access among other applications and student licensing

allows it to be installed on up to five different personal devices. Additional software for personal devices can be purchased from the WVU Software Licensing Information Center (SLIC) at greatly reduced academic prices. Students and employees can purchase the software online at http://slic.wvu.edu. Another WVU resource for discounted software is WVU OnTheHub, students and employees can purchase software at reduced academic prices on the website at http://wvu.onthehub.com. At HSC, SOLE (Study Observe Learn Engage) is the Learning Management System for students to access online courses and supplemental course materials. Students who are enrolled in a course are automatically added to the corresponding SOLE course with a student role. Students and employees can access SOLE online at this URL: http://sole.hsc.wvu.edu. SOLE was developed at HSC and houses content, information tools, communication tools and assessment tools.

Student Laptop Requirement

All graduate students are required to have a laptop meeting the minimum specifications listed on our website: https://publichealth.hsc.wvu.edu/students/student-resources/policies-forms/student-computer-policy/. In previous years, the SPH had a laptop program. Laptops were charged to students as part of tuition and fees. The cost added an extra financial burden to students who often already had laptops that could meet or exceed usability standards. Many students wanted the option to pick out their own laptop, to match their preference of Mac OS X or Windows 10, with smaller or larger screen sizes as needed. They also wanted the chance to get their own laptop at greatly discounted rates when available in stores. After receiving this feedback early on in the program, it was determined that graduate students would be better served by dissolving the laptop program for future students and allowing them to provide their own laptop as long as it meets the minimum requirements listed in the student computer policy on our website.

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

Faculty Access to Hardware

All SPH faculty and staff are allocated one or more computers to work on. Employee computers are on a 3-5 year replacement cycle. The minimum requirement for a new computer is an i5 processor, 8 GB of RAM, a solid-state hard drive and it must support hard drive encryption. Each employee can choose between a desktop or laptop computer with their preferred operating system, Windows 10 or Mac OS X.

In order to streamline equipment, and ensure it meets usability and security standards, a list of pre-approved hardware is available and continuously updated. The list of pre-approved equipment for the HSC is available at https://its.hsc.wvu.edu/computer-support/hsc-standard-equipment/. Alternative/customized equipment may be purchased, but must be reviewed and approved by Information Technology prior to purchase to ensure compatibility and that it meets current security standards. All Windows computers must have a TPM chip to support BitLocker encryption. All computers running Mac OS X must support Filevault encryption.

Classrooms within the HSC are equipped with a variety of different learning tools to support different learning environments – for example, standard lecture halls with a presenter computer, lectern and projector as well as classrooms for team-based learning and interprofessional practice

and education. Information about the rooms and capabilities can be located on the HSC website at https://its.hsc.wvu.edu/media/7907/general-room-info.pdf.

All classrooms either have a PC or are laptop ready with a TV available for display depending on the type of room. There are also conference room spaces in various locations within the HSC with five conference rooms specifically assigned to SPH. Each SPH conference room is equipped with a computer, projector/tv and web conferencing equipment as well as VOIP phones with teleconferencing capabilities. The HSC conference rooms, and most SPH conference rooms, can be booked online using the 25Live system at https://25live.collegenet.com/wvu/.

Faculty Access to Software

Public Health faculty can request software for their work computer(s) at any time. Requests for software in classroom computers, computer labs or other public machines can be made at any time, but preferably requests are made well before the semester when the software is needed. If software is required for accessibility and/or instructional purposes it is purchased by SPH or the related academic department. Software will then be promptly installed by an IT technician upon appointment. WVU has many contracts with software vendors in order to provide software to our students and faculty at no cost or at greatly reduced costs. Students and employees can purchase software online at http://slic.wvu.edu. Another WVU resource for discounted software is WVU OnTheHub, students and employees can purchase software at reduced academic prices on the website at http://wvu.onthehub.com.

- technical assistance available for students and faculty

Technical Assistance

Technical assistance for students and faculty is available from multiple sources. The SPH has an internal IT position and trained student workers to assist students, faculty and staff to meet the School's internal technical needs. In addition, the HSC Information Technology Services has several teams offering direct technical assistance.

The HSC Helpdesk provides assistance with computers, printers, networking, accounts and software. The Helpdesk can be contacted via phone, email or the walk-up service desk located in the Health Sciences on the second floor.

The SOLE support team is available to help students and instructors with questions and assistance using the SOLE. They are also located on the second floor of the HSC. The SOLE support team can be contacted via phone, email, or the walk-up service desk. Classroom Technologies is available for immediate assistance in HSC classrooms and conference rooms. Classrooms have a VoIP phone at the lectern or nearby with the number to Classroom Technologies Programmed in as a hotkey. They are also available via email to schedule a classroom walk through and answer questions.

HSC Telecommunications offers technical support for phones, conference lines and fax lines. WVU also has an Information Service Desk accessible via phone, email or the walk-up service desks located in the Mountainlair and Bennett Tower.

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

Library

The SPH access to information and technology resources is sufficient. The WVU Morgantown Libraries provide access to more than two million books, 246 databases, over 48,000 journals and numerous unique digital collections, as well as a range of instructional technologies and equipment available via loan. The Libraries have strong reference and research services and a substantial instruction and information literacy program. WVU librarians are engaged in numerous digitization projects, and have also been involved in several initiatives to support new forms of scholarly publishing and communication.

Technology

Computing and technology resources for SPH are sufficient. Students and faculty have access to a variety of hardware and software resources. They have access resources both on and offsite and on work devices and in many cases personal devices.

IT Satisfaction Results

At WVU and HSC, the majority of IT requests are handled through a ticket tracking system call TeamDynamix. SPH IT Support uses TeamDynamix as well as the HSC Helpdesk and SOLE Support. At the resolution or closing of tickets a percentage of requestors are sent a survey to gauge their customer service experience. From a scale of 0 to 10, 0 being not satisfied at all and 10 being completely satisfied, they are asked to rate their level of satisfaction with the quality of service. Survey results indicate that on average the students, faculty and staff of the SPH rated overall satisfaction at 9.51/10, satisfaction with the fix/problems resolution at 9.46/10, the manner or professionalism of the IT Technicians involved at 9.74/10, and the Timeliness of the resolution at 9.59/10. That indicates that on average people are happy with the assistance they receive.

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

Strengths: SPH students, faculty and staff have seamless access to a vast array of information and technology resources both on/off campus. They also have excellent support for those resources. Computers are provided for faculty replaced every 3-5 years and as needed. There is an abundance of public spaces where students have access to computers and technology on campus.

The network access at the HSC is superior. WVU maintains redundant 10 Gbps Internet connections delivered by two different providers. Each internet connection is terminated at a different site on WVU's core network to provide geographic redundancy ensuring continuity of service if one location or service provider is unavailable. This ensures almost perfect reliability and extremely fast network speeds. Students and employees also have WiFi access across the Health Sciences building. Students and faculty connect to WVU.Encrypted with their credentials, visiting guests from other Universities can seamlessly use eduroam and other visitors can use the WVU.Guest network.

Weaknesses: Currently, the hardware in the student computer lab is being upgraded.

Plans: Assess the capacity of the student computer lab.

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

The SPH has four foundational public health courses:

- PUBH 610 Contemporary Foundations of Public Health Practice
- PUBH 611 Applied Epidemiology
- PUBH 612 Research Translation and Evaluation in Public Health Practice
- PUBH 621 Public Health Prevention and Intervention

Table D1-1: Content Coverage for MPH

Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy and values	PUBH 610 Contemporary Foundations of Public Health Practice
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 610 Contemporary Foundations of Public Health Practice
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 612 Research Translation and Evaluation in Public Health Practice
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBH 610 Contemporary Foundations of Public Health Practice; PUBH 611 Applied Epidemiology
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 610 Contemporary Foundations of Public Health Practice; PUBH 621 Public Health Prevention and Intervention
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 610 Contemporary Foundations of Public Health Practice; PUBH 612 Research Translation and Evaluation in Public Health Practice
7. Explain effects of environmental factors on a population's health	PUBH 611 Applied Epidemiology
8. Explain biological and genetic factors that affect a population's health	PUBH 611 Applied Epidemiology
9. Explain behavioral and psychological factors that affect a population's health	PUBH 611 Applied Epidemiology
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 610 Contemporary Foundations of Public Health Practice
11. Explain how globalization affects global burdens of disease	PUBH 611 Applied Epidemiology
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	PUBH 611 Applied Epidemiology

2) Document the methods described above. This documentation must include all referenced syllabi, samples of tests or other assessments and web links or handbook excerpts that describe admissions prerequisites, as applicable.

Please see Section D1 of the electronic resource file for MPH integrated core curriculum syllabi.

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

Strengths: We have exceptional faculty teaching in the four courses that cover foundational competencies.

Weaknesses: None noted

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., preceptors) 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). For combined degree students, assessment may take place in either degree school.

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

Along with the list of courses below, each student, regardless of concentration, is required to maintain a portfolio that demonstrates their ability to meet the competencies associate with the MPH Foundational Courses, the Department Major Courses, and to apply a selection of those competencies in an approved practice-based setting(s).

Table D2-1.1: Requirements for MPH degree, Biostatistics Concentration

Course number	Course name*	Credits (if applicable)
PUBH 610	Contemporary Foundations of Public Health	2
PUBH 611	Epidemiology for Public Health Practice	2
PUBH 612	Research Translation and Evaluation in Public Health Practice	4
PUBH 620	Building and Sustaining Public Health Capacity	2
PUBH 621	Public Health Prevention and Intervention	3
PUBH 630	MPH Field Practicum	3
PUBH 640	Leadership and Collaboration in Public Health	3
PUBH 641	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
BIOS 611	Data Management and Reporting	3
BIOS 623	Biostatistics Careers and Skills	2
BIOS 629	Application of Biostatistics to Public Health Data	2
BIOS 663	Introduction to Meta-Analysis	3
Elective		3
Elective		3
Portfolio		

http://catalog.wvu.edu/graduate/publichealth/biostatistics/#masterstext

Table D2-1.2: Requirements for MPH degree, Epidemiology Concentration		
Course number	Course name*	Credits (if applicable)
PUBH 610	Contemporary Foundations of Public Health	2
PUBH 611	Epidemiology for Public Health Practice	2
PUBH 612	Research Translation and Evaluation in Public Health Practice	4
PUBH 620	Building and Sustaining Public Health Capacity	2
PUBH 621	Public Health Prevention and Intervention	3
PUBH 630	MPH Field Practicum	3
PUBH 640	Leadership and Collaboration in Public Health	3
PUBH 641	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
BIOS 611	Data Management and Reporting	3
EPID 611	Concepts and Methods of Epidemiology	3
EPID 612	Applied Epidemiology for Public Health	3
EPID 629	Epidemiology Capstone	2
EPID 696	Graduate Seminar	2
Elective		3
Elective		3
Elective		3
Portfolio		

http://catalog.wvu.edu/graduate/publichealth/epidemiology/#masterstext

Table D2-1.3: Requirements for MPH degree, Health Policy, Management and Leadership Concentration		
Course number	Course name*	Credits (if applicable)
PUBH 610	Contemporary Foundations of Public Health	2
PUBH 611	Epidemiology for Public Health Practice	2
PUBH 612	Research Translation and Evaluation in Public Health Practice	4
PUBH 620	Building and Sustaining Public Health Capacity	2
PUBH 621	Public Health Prevention and Intervention	3
PUBH 630	MPH Field Practicum	3
PUBH 640	Leadership and Collaboration in Public Health	3
PUBH 641	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
HPML 601	Foundations of Health Policy	3
HPML 610	Health Economics for Population Health	3
HPML 620	Managing Robust Public Health Organizations	3
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 623	Healthcare Finance	3
HPML 624	Advanced Issue Analysis for Health Policy	3
HPML 629	Tools for Health Policy and Management Communication	2
Elective		1
Elective		1
Portfolio		

http://catalog.wvu.edu/graduate/publichealth/hlthplcymangldr/#masterstext

Table D2-1.4: Requirements for MPH degree, Occupational and Environmental Health Sciences Concentration		
Course number	Course name*	Credits (if applicable)
PUBH 610	Contemporary Foundations of Public Health	2
PUBH 611	Epidemiology for Public Health Practice	2
PUBH 612	Research Translation and Evaluation in Public Health Practice	4
PUBH 620	Building and Sustaining Public Health Capacity	2
PUBH 621	Public Health Prevention and Intervention	3
PUBH 630	MPH Field Practicum	3
PUBH 640	Leadership and Collaboration in Public Health	3
PUBH 641	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
OEHS 610	Environmental Practice	3
OEHS 620	Occupational and Environmental Hazard Assessment	4
OEHS 622	Public Health Toxicology	3
OEHS 623	Occupational Injury Prevention	3
OEHS 629	Capstone	2
OEHS Elective		4
Elective		3
Portfolio		

http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#masterstext

Table D2-1.5: Requirements for MPH degree, Social and Behavioral Sciences Concentration		
Course number	Course name*	Credits (if applicable)
PUBH 610	Contemporary Foundations of Public Health	2
PUBH 611	Epidemiology for Public Health Practice	2
PUBH 612	Research Translation and Evaluation in Public Health Practice	4
PUBH 620	Building and Sustaining Public Health Capacity	2
PUBH 621	Public Health Prevention and Intervention	3
PUBH 630	MPH Field Practicum	3
PUBH 640	Leadership and Collaboration in Public Health	3
PUBH 641	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
SBHS 611	Community Assessment	3
SBHS 613	Public Health Program Evaluation	3
SBHS 615	Intervention Design	3
SBHS 616	Introduction to Public Health Interventions for Social and Behavioral Scientists	4
SBHS 617	Community Engagement and Advocacy in Public Health	2
SBHS 620	Implementing and Managing Public Health Programs	3
SBHS 629	Capstone Course	2
SBHS 693	Professional Orientation (Special Topics)	2
Portfolio		

http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#masterstext

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

Table D2-2: Assessment of Competencies for MPH (all concentrations)		
Competency	Course	Describe specific assessment opportunity
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	PUBH 611 Applied Epidemiology	**Week 12: PowerPoint presentation**: Develop a scenario of a disease outbreak and how the student would conduct an epidemiologic investigation of an outbreak. **Mid-term and Final exams** have study design information from journal articles (a one paragraph scenario per study design) and students are asked to identify the epidemiologic study design, along with the exposure and outcome being studied.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	PUBH 612 Research Translation and Evaluation in Public Health Practice	**Assignment Examples**: Evaluation of two Public Health Research articles using an 11-item questionnaire for each. **Quiz and Exam Question Examples**: (1) Which of the following tests is used to examine the difference between two separate groups when there is only one dependent (outcome) variable and the data are continuous, i.e., interval or ratio?; (2) Which of the following tests would you use if you wanted to see if there was a difference in grade point averages between undergraduate students, master's degree students, and doctoral degree students?; (3) Which of the following is a type of qualitative research method that observes social systems, behaviors, cultures, and social life (activities of daily living)?; (4) A as general "rule of thumb", you should avoid the use of percentages (%) in qualitative research if the number of cases are less than?
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	PUBH 612 Research Translation and Evaluation in Public Health Practice	**Assignment Examples:** (1) Using the "Data Analysis" package in MS Excel and an example data set, enter all data into an Excel worksheet and generate descriptive statistics; (2) Using the "Data Analysis" package in MS Excel and an example data set, enter all data into an Excel worksheet and perform independent and paired t-tests; (3) qualitative data analysis - Categorize the responses of

		123 teachers who were asked the question “What major factors lead you into teaching?”
		Quiz and Exam Question Example: (1) What is the coefficient of variation if the mean is 10 and the standard deviation is 8?
		Assignment Examples: (1) Using the “Data Analysis” package in MS Excel and an example data set, enter all data into an Excel worksheet and generate descriptive statistics; (2) Using the “Data Analysis” package in MS Excel and an example data set, enter all data into an Excel worksheet and perform independent and paired t-tests; (3) qualitative data analysis - Categorize the responses of 123 teachers who were asked the question “What major factors lead you into teaching?”
		Quiz and Exam Question Example: (1) What is the coefficient of variation if the mean is 10 and the standard deviation is 8?
4. Interpret results of data analysis for public health research, policy or practice	PUBH 612 Research Translation and Evaluation in Public Health Practice	**Assignment Examples:** (1) Interpret the results of quantitative data output from an independent – t-test (Sample size, F value, t-value for equal variances, degrees of freedom, p-values, mean differences, standard errors of the differences, 95% confidence intervals) and correlation coefficients (sample size, degrees of freedom, correlation coefficient, p-value, percentage of variation accounted for); (2) Using a 5-item questionnaire, interpret the results from a qualitative study on clinic and community member perspectives on intervention toolkits.
		Quiz and Exam Question Examples: (1) The results of a statistical test may be statistically significant but not necessarily important from a practical perspective; (2) Which of the following IS NOT one of the overall guidelines for interpreting qualitative research?
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	PUBH 620 Building and Sustaining Public Health Capacity	**Critique 6** Focus: Healthcare Systems (read: Brill, Conrad, & Wilper) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class.
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels	PUBH 620 Building and Sustaining Public Health Capacity	**Critique 3** Focus: Inequalities and Health (read: Case & Deaton, Frohlich & Potvin, Muntaner & Lynch, & Navarro) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class. **Critique 4** Focus: Discrimination and Health (read: Krieger et al., Muntaner, Williams, & William) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class. **Critique 7** Focus: Work, Health, and Policy Protections (read: Krieger, Saucedo, Woolfson) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class.
Planning & Management to Promote Health		
7. Assess population needs, assets and capacities that affect communities' health	PUBH 621 Public Health Prevention and Intervention	**Written Assignment; Final Oral Presentation; Written Executive Summary.** Students describe the health, social and educational needs for a given target population or community in which they would like to implement an (hypothetical) intervention. They are asked to list at least 3 needs or issues for each category (health, social, educational) and support their ideas with appropriate citations. They are also asked to describe the assets and capacities of the population and/or community in which the intervention will take place in this assignment. Specifically, they are asked to assess and describe the given community's social environment, informational environment, policy/practice environment, and physical environment assets that might support intervention planning, implementation and/or evaluation. This information is refined and integrated into the students' final oral presentation and accompanying written executive summary.
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	PUBH 621 Public Health Prevention and Intervention	**Written Assignment; Final Oral Presentation and Executive Summary.** Students are asked to write a narrative statement in which they describe cultural issues and practices that they (and their hypothetical team) need to be aware of during the intervention

		planning, design, implementation, and evaluation phases of their projects with their selected communities/populations of interest. They also must describe how their team, including stakeholders that might be involved in their planning group would practice cultural humility and manage the cultural issues described. This information is refined and integrated into the students' final oral presentation and accompanying written executive summary.
9. Design a population-based policy, program, project or intervention	PUBH 621 Public Health Prevention and Intervention	**Four Written Assignments; Final Oral Presentation and Executive Summary.** In this course, all class activities and student assignments are focused on the development of a hypothetical prevention or intervention program or policy that addresses a health topic that is of interest to them. The activities and assignments form the basis for and build toward the project for the course, the design of a population-based policy, program, project, or intervention. They submit four assignments that build toward describing the intervention throughout the semester. They incorporate feedback and revise their interventions and then present the final project via oral presentation and in an Executive Summary at the end of the semester.
10. Explain basic principles and tools of budget and resource management	PUBH 640 Leadership and Advocacy in Public Health	**Taught during Week 12** (Fiscal Leadership) **Practiced during Week 12** in-class learning activities (case study, problem solving activity) **Assessed by** budget activity (in-class assignment) rubric
11. Select methods to evaluate public health programs	PUBH 621 Public Health Prevention and Intervention	**Written Assignment; Final Oral Presentation and Executive Summary.** In a written assignment, students choose an appropriate design to evaluate their hypothetical public health program/intervention and describe the strengths and weaknesses of the chosen design. Students also list the behavioral and environmental outcomes that are to be measured in their programs, with appropriate data collection/evaluation time points. They incorporate feedback and revise their interventions and then present the final project via oral presentation and in an Executive Summary at the end of the semester.
Policy in Public Health		
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	PUBH 620 Building and Sustaining Public Health Capacity	**Critique 5** Focus: Politics and Health (read: Navarro et al., Daubert, & Michaels) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class.

		Critique 8 Focus: Social Movements and Health (read: Kapilashrami et al., Brown & Zavestoski, Brown & Fee, & NICHQ) Provide a brief critique that both summarizes and critiques the readings. 2 typed pages, which will be shared through discussion in class.
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	PUBH 640 Leadership and Advocacy in Public Health	**PUBH 640: Taught during Week 13** (Collaborative Leadership)
		Practiced during Week 13 in-class learning activities (case study, problem solving activity)
		Assessed by collaboration activity (in-class assignment) rubric
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations	PUBH 620 Building and Sustaining Public Health Capacity	**Final Paper and Presentation** "Framing a Public Health Question or Topic": Students will research a topic of their choosing and frame it as a public health problem using perspectives taught in class. Topics will be approved by instructor. Papers will be approximately 20 pages in length. Students will also do an oral presentation of their paper during the final class period. Presentations will include a 10 minute PowerPoint presentation.
15. Evaluate policies for their impact on public health and health equity	PUBH 612 Research Translation and Evaluation in Public Health Practice	**Assignment Example:** Completion of a detailed five-item questionnaire to evaluate an article on the "State of Evaluation Research on Food Policies to Reduce Obesity and Diabetes Among Adults in the United States"
		Quiz and Exam Question Example: Which of the following is the framework order for policy evaluation in public health?
Leadership		
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	PUBH 640 Leadership and Advocacy in Public Health	**Taught** throughout course
		Practiced during in-class learning activities (case studies, problem solving activities) throughout course
		Assessed multiple times by Readiness Assessment Tests (throughout course), Group Participation Rubric, and Personal Leadership Philosophy paper
17. Apply negotiation and mediation skills to address organizational or community challenges	PUBH 640 Leadership and Advocacy in Public Health	**Taught during Week 3** (Situational Leadership)
		Practiced during Week 3 in-class learning activities (negotiation skills assignment)
		Assessed by negotiation skills activity (in-class assignment) rubric
Communication		
18. Select communication strategies for different audiences and sectors		**Writing skills & expectations taught Week 1**; Oral presentation skills & expectations taught Week 6

	PUBH 640 Leadership and Advocacy in Public Health	**Writing assessed by** Book Summary & Personal Leadership Philosophy using Writing Rubric; Presentations skills assessed by Book Presentations using Oral Presentation Rubric
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	PUBH 641 Systems Thinking in Public Health Practice	**PUBH 640: • Writing skills & expectations taught Week 1**; Oral presentation skills & expectations taught Week 6
		Writing assessed by Book Summary & Personal Leadership Philosophy using Writing Rubric; Presentations skills assessed by Book Presentations using Oral Presentation Rubric
20. Describe the importance of cultural competence in communicating public health content	PUBH 621 Public Health Prevention and Intervention	**Written Assignment; Final Oral Presentation and Executive Summary.** Students are asked to write a narrative statement in which they describe cultural issues and practices that they (and their hypothetical team) need to be aware of during the intervention planning, design, implementation, and evaluation phases of their projects with their selected communities/populations of interest. They also must describe how their team, including stakeholders that might be involved in their planning group would practice cultural humility and competence and manage the cultural issues described. This information is refined and integrated into the students' final oral presentation and accompanying written executive summary.
Interprofessional Practice		
21. Perform effectively on interprofessional teams	PUBH 696 Graduate Seminar (Interprofessional Education)	**Taught** – during phase 1 and throughout the course. **Practiced** – in phase 2, student will complete at least one approved experience. **Assessed** – in phase 3, students will submit a reflective essay and conduct a presentation to peers and faculty.
Systems Thinking		
22. Apply systems thinking tools to a public health issue	PUBH 641 Systems Thinking in Public Health Practice	**Interdisciplinary group paper and presentation** – interdisciplinary groups students will prepare a paper and presentation to address a self-selected public health issue based on a scenario in a local health department. Students will use the key concepts and tools learned in the course to: 1) create visual representations of the system; 2) identifying another system outside of public health with whom to collaborate; 3) describing potential responses using the 10 Essential Public Health Services; and 4) providing potential solutions using potential leverage points taught in the course.

3) 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.

Please see D2 of the ERF to view the syllabi addressing the competencies mentioned in the above table.

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

Strengths: Beginning with planned revisions to the MPH curriculum in 2016 (the 21st Century MPH) the WVUSPH now has a fully articulated program with all required competencies and assessments in place. This includes an Interprofessional Experience with didactic and experiential components with other health professions schools and a culminating experience course to demonstrate learning outcomes at the end of student's program.

Weaknesses: Historically, efforts to provide WVU public health students with an interprofessional education experience has been constrained due to Medicine, Dentistry, Nursing, and Rehabilitation Sciences focus on clinical settings and patient-centered outcomes. In 2017, IPE efforts were more in line with desired experiences for Public Health students with the renewal of the Area Health Education Centers (AHEC) grant and the AHEC Scholars Rural Immersion focused experience. (see materials in section D2 of the ERF). In anticipation of the revised requirements as part of the new CEPH criteria, SPH asked to contribute to the development of the Area Health Education Center (AHEC) grant and the subsequent Rural Scholars program. In 2018, a Cultural Competence in Health Professions Module was developed for the AHEC Rural Scholars program as a pilot for all HSC graduate student involvement in interprofessional education. Undergraduate students were not eligible per grant requirements to participate.

Plans: Starting in the Fall semester of 2019, the SPH formally joined the renewed efforts of the HSC Office of Interprofessional Education. Two cohorts of public health students, will participate in the health sciences IPE programming. Second year MPH students will enroll in the PUBH 696- IPE Graduate Seminar course during their final semester. Senior BSPH-Patient Navigation students enrolled in PUBH 400-Field Placement Preparation Seminar will participate in the health science center's IPE programming. This course is taken prior to the Patient Navigation students completing their 75 hour experiential agency rotations and capstone.

The annual HSC IPE programming brings together nearly 600 students and 50 faculty and staff facilitators from 12 science colleges or programs to explore interprofessional collaborative practice across health disciplines and professions. Students from public health, medicine, nursing, pharmacy, occupational therapy, physical therapy, dentistry, etc. will be immersed in a highly participative interprofessional learning experience that is case and lecture-based. At least one student from each discipline is assigned to a team facilitated by at least one trained faculty or staff.

The programming is designed by three phases. Phase one consists of five Monday Night didactic sessions. The 2019-20 sessions are aligned with the IPE core competencies of teamwork, communication, values/ethics and roles and responsibilities for collaborative practice. Session topics and activities include speed networking, the gamification of a vaccination case, and a panel discussion with peer recovery coaches on overcoming stigma of substance abuse disorder.

Phase two consists of simulation and community health activities. Students have the option of participating in activities such as disaster response, navigating an outbreak, Narcan administration or

community health fairs. Online modules will also be optional for students. Students complete collaboration and attitudinal surveys at the conclusion of each activity.

Phase three for MPH students will include submission of a reflective essay and presentation to peers and faculty on their experience. The essay and presentation will focus on demonstrating attainment of the following IPEC competencies and sub-competencies.

- Describe how professionals in health and other fields can collaborate and integrate clinical care and public health interventions to optimize population health
- Reflect on individual and team performance for individual, as well as team, performance improvement.
- Communicate the importance of teamwork in population health programs and policies.
- Recognizing how one's individuality contributes to effective communication, conflict resolution, and positive interprofessional working relationships.

The BSPH-Patient Navigation students will submit a reflective essay on *The Role of the Patient Navigator on an Interprofessional Team* for their PUBH 400 course.

Moving forward, the Director of Public Health Practice will continue to collaborate with the Health Sciences programs as well as other disciplines including social work, education, nutrition, etc. to strengthen the interprofessional education and opportunities related to the health of populations.

D3. DrPH Foundational Competencies (if applicable)

This criterion is 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 in addition to those listed in Criterion D2 or 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 (e.g., preceptors) 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.

Table D4-1.1: Assessment of Competencies for MPH in Biostatistics

Competency	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Manage data structures efficiently using standard statistical software.	BIOS 611 Data Management and Reporting (I:BIOS 611; R: BIOS 623, BIOS 629)	**Assignment N** – Students are assigned a project in which they will apply statistical reporting methods to manipulate a large Public Health database, creating compelling graphical and tabular summaries to investigate a scientific finding. Results will be compared to published scientific findings. Software used may include R, Python, SAS, SQL, or other current, relevant software as determined by the instructor.
2. Evaluate basic multivariable statistical techniques commonly used in clinical and public health settings.	BIOS 603 Applied Biostatistics II (I: BIOS 603; R: BIOS 604, BIOS 623, BIOS 629)	**Final Exam** – Take a dataset and conduct a multivariable statistical analysis typically done in an applied area of interest (typically clinical or public health settings); write up as one would a research paper.
3. Explain the motivations, underlying theory, and assumptions of advanced methodological tools for biostatisticians.	BIOS 604 Applied Biostatistics III (I: BIOS 604; R: BIOS 623, BIOS 629)	**Final Project presentation and discussion** – Present and critique in detail the statistical methodology (including correct selection, assumptions, and presentation of results) of an article in an applied area of interest; discuss other presentations and critiques paying specific attention to appropriate statistical methodology
4. Conduct and evaluate systematic reviews with meta-analysis.	BIOS 663 Introduction to Meta-Analysis (I: BIOS 663)	**Meta-analysis article critiques, original study critiques, systematic review** with meta-analysis presentation and paper, quizzes and exams
5. Develop written presentations based on statistical analyses for both substantive investigators and members of the community.	BIOS 623 Biostatistics Careers and Skills (I: BIOS 623, BIOS 629; R: BIOS 603, BIOS 663)	**Final consulting project report** – Over the course of the semester, a written report of analysis will be developed in conjunction with input from the substantive investigators and members of the community. Report should be written with a naïve reader in mind with practical and applied explanations of analysis and results.
6. Develop oral presentations based on statistical analyses for both substantive investigators and members of the community.	BIOS 629 Application of Biostatistics to Public Health Data (I: BIOS 623, BIOS 629; R: BIOS 604)	**Final presentation** – The written presentation should also be orally presented to the substantive investigators/community members.

Table D4-1.2: Assessment of Competencies for MPH in Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Derive and assess basic epidemiologic frequencies and association.	EPID 611 Concepts and Methods of Epidemiology, EPID 612 Applied Epidemiology of Public Health, EPID 629 Epidemiology Capstone	**EPID 611: Week 2, Homework #1** requires students to calculate incidence and prevalence for a population of workers; In class activity Week 8 requires students to calculate risk ratios and odds ratios and interpret them.; **EPID 629- final paper, oral presentation, biweekly reports** : Students are expected to demonstrate their grasp of these concepts in: discussing the findings of prior studies relevant to their project; in calculating and interpreting measures of frequency and association using original or secondary data (e.g., in describing the study population and deriving estimates of risk); and in discussing these findings in the discussion section.
2. Compare and contrast epidemiologic designs.	EPID 611 Concepts and Methods of Epidemiology, EPID 612 Applied Epidemiology of Public Health, EPID 629 Epidemiology Capstone	**EPID 611: Week 7, Midterm Exam, Question 2** requires students to choose and defend a study design to answer a hypothetical epidemiologic question; **Week 7, Midterm Exam, Question 3** requires students to compare and contrast common epidemiologic study designs in terms of their strengths and limitations for answering public health questions.; **EPID 629- final paper, oral presentation, biweekly reports** : In the introduction and discussion sections of their papers (and in the presentation to faculty and students), students will briefly discuss prior research and current gaps in the literature that will be addressed (at least in part) by their project, as well as, if appropriate, the rationale for choosing a specific study/project design); part of this discussion will center on both strengths and weaknesses in the design of previous studies. Students will also highlight the major strengths and limitations of their own study/project design, as well as ways to address these limitations going forward.
3. Weigh public health problems in terms of magnitude, person, time, and place.	EPID 611 Concepts and Methods of Epidemiology; EPID 612 Applied Epidemiology of Public Health, EPID 629 Epidemiology Capstone	**EPID 611: Week 7, Midterm Exam Question 1** provides students with raw data regarding an outbreak and requires them to calculate incidence of a disease in the total population and in certain subgroups. They are to answer questions regarding what subgroups are most affected by the outbreak; **EPID 612**- exams, quizzes; **EPID 629- final paper, oral presentation, biweekly reports** : These issues will be addressed in both the introduction (background and rationale for the project) and discussion. E.g., each student will detail why a specific health condition/problem is of public health significance, including magnitude (e.g., incidence/prevalence and clinical, social, and economic impact), time trends, number and characteristics of people affected, and geographic regions involved. The student will also explain how their project will help address the public health problem identified, as well as the public health implications of their project findings.

4. Measure occurrences of incidence, morbidity, and mortality.	EPID 611 Concepts and Methods of Epidemiology, EPID 612 Applied Epidemiology of Public Health, EPID 629 Epidemiology Capstone	**EPID 611: In-class activity, Week 3**: students calculate standardized mortality ratios and age standardized rates for hypothetical towns/populations and discuss which town is more at risk for a specific disease; **EPID 612**- exams, quizzes; **EPID 629- final paper, oral presentation, biweekly reports** : Measurement of these constructs will depend on the project design and objectives. As appropriate and relevant to their project, students will (using original or secondary data) measure prevalence/incidence and/or mortality rates of a given condition(s) targeted, assess associated morbidity, as well as evaluate the occurrence and influence of specific comorbid conditions (e.g., as potential confounders, mediators, or modifiers).
5. Derive appropriate inferences from epidemiologic data.	EPID 611 Concepts and Methods of Epidemiology, EPID 612 Applied Epidemiology of Public Health, EPID 629 Epidemiology Capstone	**EPID 611: Week 11, Homework #4** requires students calculate odds ratios and risk ratios in addition to sensitivity and specificity for two screening tests. Students are required to interpret their calculations; **EPID 612**- exams, quizzes; **EPID 629- final paper, oral presentation, biweekly reports** : All students will be expected, in their final papers and presentations, to demonstrate proficiency in interpreting and discussing/critiquing epidemiologic data, including both that from their own study/project and that from other relevant epidemiologic studies.

Table D4-1.3: Assessment of Competencies for MPH in Health Policy, Management, and Leadership		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Outline the process, production and implementation of health policy (POLICY)	HPML 601 Foundations of Health Policy	**The first test** in HPML 601, which is essay-based, asks the students to choose 4 of 5 questions about the policy process. All of these questions ask the students to give specific example of policy at the formation, implementation, and evaluation stages. HPML 601 uses weekly discussion questions that address this.
2. Assess structures and processes for effective health services management (MANAGEMENT)	HPML 620 Managing Robust Organizations	HPML 620, has **3 case studies and 3 problem solving activities** that address effective health services management.
3. Employ processes and applications that positively effect both individuals and group goals (LEADERSHIP)	HPML 681 Applied Health Care Leadership	HPML 681 uses **Readiness Assessment Tests** (throughout course), Group Participation Rubric, and Personal Management Philosophy paper that address both individuals and group goals. that includes both individuals and group goals
4. Develop analytic, statistical, and economic skills for application to health service issues (SKILLS)	HPML 610 Health Economics for Population Health, HPML 622 Analytic Methods for HPML	HPML 610 Homework Problem Sets: **Homework 1**- Supply and Demand, **Homework 2**- Information Economics, **Homework 3**- Health Innovation, **Homework 4**- Health Policy and Public Health Economics. For each problem set, students will respond to prompts on the above topics related to the application of analytic, statistical, and economic principles. HPML 622 TO BE ADDED....
5. Connect theory and skills in policy, management, and leadership issues to real world health issues (APPLICATION)	HPML 601 Foundations of Health Policy	**The first test** in HPML 601, which is essay-based, asks the students to choose 4 of 5 questions about the policy process. All of these questions ask the students to give specific example of policy at the formation, implementation, and evaluation stages.

Table D4-1.4: Assessment of Competencies for MPH in Occupational and Environmental Health Sciences		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Appraise potential hazards in an occupational or environmental setting.	OEHS 620 Occupational and Environmental Hazard Assessment	**Appraise** existing occupational and environmental hazards via lab modules on PM2.5, volatile organic compounds, light monitoring, ventilation and environmental water sampling.
2. Execute methodologies of primary and secondary prevention for environmental health issues	OEHS 610 Environmental Practice	**The final exam** covers primary and secondary prevention technology including the hierarchy of controls
3. Recommend appropriate methods for the control of occupational hazards.	OEHS 620 Occupational and Environmental Hazard Assessment	**Describe occupational hazards and devise solutions**. In class discussion, scenarios and final exam that requires evaluating a workplace scenario
4. Demonstrate the influence of toxicological principles on public health outcomes.	OEHS 622 Public Health Toxicology	**Presentations** Week 27, 28, 29 The presentation should be a maximum of 15 minutes including questions and follow a normal seminar format: introduction, background, current state of the science, conclusions. Topics should not be limited to only those discussed in class, but will need to be pre-approved by the instructor. Students will be evaluated on information presented, style, ability to answer questions and audience engagement.
5. Detect and critique the strengths and weaknesses of the occupational injury surveillance systems used in the US.	OEHS 623 Occupational Injury Prevention	**The OEHS 623 Exam I** covers occupational injury surveillance systems in the US.

Table D4-1.5: Assessment of Competencies for MPH in Social and Behavioral Sciences		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1.Demonstrate Community Engagement Principles when addressing public health problems.	SBHS 617 Engagement & Advocacy	**Self-Reflection Exercise**: This is the culminating exercise for the engagement component of SPH 617. It is designed to integrate student understanding of the key principles and processes of community engagement with self-understanding of their own strengths, challenges, and biases that may impact their ability as effective engagement agents. This exercise follows content that covers basic principles of community engagement; describing the roles of various stakeholders in engagement; assessing community characteristics as they relate to engagement; and key principles of effective stakeholder engagement such as identifying diverse interest and perspectives as well as common agendas, and planning and assessing engagement activities. Importantly, from day 1, students are asked to identify the cognitive, personal, and interpersonal competencies necessary for effective engagement. They also reflect on those qualities in themselves, identify strengths and areas for targeted improvement, and existing biases they may have in working with diverse communities.
		The Self-Reflection Exercise asks students to pick 2 communities; one of these is a community where they are a member and the other is a community where the student is not a member but where s/he might like to do community engagement. Comparing these two scenarios is designed to bring to awareness how previous knowledge and experience can shape perceptions, assumptions, and biases that are part of the self-examination required for effective engagement. For each community, students describe the community and its strengths and challenges, their relationships to that community, student assumptions and biases (positive and negative) they have about each community.
		The next part of this exercise requires that students use information from the first part to identify a public health issue of concern to each community and to describe initial steps at engaging each community on that issue. Importantly, students are then asked to review and reflect on these steps, and to identify how they will address their r assumptions and biases as they move through these steps. Finally, students are asked to how they will ascertain progress in addressing these biases.
2. Appraise Qualitative Data used for evaluating factors associated with improving public health.	SBHS 616 Introduction to Public Health Interventions for Social and Behavioral Scientists	**Assessment Report**: Students are required to develop a qualitative interview protocol using research on best practices/guidance from the field as well as looking at multiple examples of qualitative interview protocols. They will structure this protocol and use it for the interview portion of the Needs Assessment that is conducted with our community partner. With the community partner's permission, students audio record and take notes of the interview so that they can then conduct thematic analysis on the notes/transcripts to find emergent and main themes for use in the Needs Assessment. They will use these themes to guide their understanding of how to develop an intervention with the community partner. This interview protocol guide is turned in

		along with the results of the interview, including a detailed description of their methods and results of the thematic analysis, with interpretation and implications for use in their intervention.
3. Appraise Quantitative Data used for evaluating factors associated with improving public health.	SBHS 611 Community Assessment	**Tabletop Assessment Report** - All students in SBHS 611 prepare a paper that mimics the process of developing a Community Health Needs Assessment (CHNA) for a county in West Virginia. The purpose is to familiarize the students with the process of responding to a Request for Proposals (RFP) for a real setting by applying their knowledge of the Needs Assessment (NA) process to identify a priority health issue to address and propose how they'll identify what is needed to address the issue. Students are responsible for preparing a proposal of 14-18 pages and making multiple, brief, 10-15-minute presentations to their fellow students using the following sections that require accessing existing data sources such as those housed on the County Health Rankings, CDC's BRFSS and EPH, and Community Commons online data repositories: 1) county demographic profile, 2) county health profile, and 3) needs assessment proposal.
4. Implement Social and Behavioral Theories & Frameworks designed to describe public health problems and improve public health interventions.	SBHS 615 Intervention Planning & Design	**Intervention Program Plan**: Students will design a theory informed intervention program plan to be submitted in an essay format. This allows students to develop knowledge and apply concepts from this course to a topic that is of interest to them and is consistent with a federal or state priority objectives for health. The project should be based on solid criteria such as either state or federal objectives in the Healthy People 2020 document, the West Virginia Department of Health and Human Resources (WVDHHR), American Public Health Association (APHA), or the Centers for Disease Control and Prevention (CDC), as examples. Students will select a topic amenable to an informational/educational approach that can apply behavioral health science theory and develop it into a proposed intervention to contribute to that objective. Specifically: based on theory covered in SBHS 615, students will apply a theory to their proposed intervention strategies.
5.Recommend interventions likely to improve public health.	SBHS 615 Intervention Planning & Design	**Intervention Program Plan**: Students will design a theory informed intervention program plan to be submitted in an essay format. This allows students to develop knowledge and apply concepts from this course to a topic that is of interest to them and is consistent with a federal or state priority objectives for health. The project should be based on solid criteria such as either state or federal objectives in the Healthy People 2020 document, the West Virginia Department of Health and Human Resources (WVDHHR), American Public Health Association (APHA), or the Centers for Disease Control and Prevention (CDC), as examples. Students will select a topic amenable to an informational/educational approach that can apply behavioral health science theory and develop it into a proposed intervention to contribute to that objective. Specifically, students will use solid criteria to recommend interventions directed to benefit an identified target audience.

6.Organize Interventions including the assessment, planning, implementation, and evaluating phases of public health interventions.	SBHS 620 Implementation & Program Management	**Final Project & Presentation on Implementation and Management Plan**. For this assignment, you will include a description of implementation and management plan; each student will facilitate one aspect of project development using the skills discussed in the class. A comprehensive summary of the sustainability plan with references (see details below) need to be submitted the day of the presentation and include the following additional items:
		a. Gantt Chart will include written timeline addressing SMART (Specific, Measurable, Attainable, Relevant, Time bound) goals, with appropriate visual display and scope.
		b. Using needs assessment data, list and describe/develop formative research questions, data collection methods, and sources
		c. Determine the skill sets and resources required for the program
		d. Written messages, graphic displays, tailored to audience and context; clear use of formative research to inform messaging
		e. Pilot-test one piece of program material with members of the target audience.
		f. Written resource plan for proposed intervention.
		g. Develop a process evaluation/program fidelity tool
		h. Submit two tools or instruments pertinent to program implementation and evaluation taking into account stakeholder and public health interests and needs
		i. Written or oral description of sustainability plan; each student facilitates one aspect of project development using these skills. Note: Facilitates one part of the overall course project and is evaluated/receive feedback by peers and instructors
		j. Develop a sustainability plan for the intervention or program.
		k. In class demonstrations of effective group processes; class activities would be conducted using these skills – if not all the time – at least a significant portion of the time.
		Comprehensive Plan Package + Oral Presentation. In place of a final exam, for your final project you will have an opportunity to revise your previous work on your stakeholder engagement plan, resource plan, sustainability plan and implementation and management as one comprehensive, well edited, professional quality document. Please provide a brief 1-2 introduction to the overall collection of plans, be mindful of the feedback you've received from your instructors on previous submissions, and thoughtful about your own revisions. On the final day of class, you will present your comprehensive plan package to the class in the form of a 15-20 minute professional

		presentation. Please develop and distribute a one-page handout that highlights the key elements of your implementation and management plan.
7. Demonstrate Effective Communication Strategies for diverse stakeholders.	SBHS 613 Program Evaluation in Public Health	**Evaluation Plan Proposal & Final Report Meeting** - Mid-way through the semester, the students in 613 present an Evaluation Plan Proposal to a client with whom they have met to identify an evaluation need. This is a draft evaluation plan that is presented to the client in the form of a PowerPoint or Vizio presentation in person or via webinar. The client and relevant key stakeholder(s) will provide feedback about the evaluation plan much like a professional client would when negotiating an evaluation contract.
		At the end of the semester, the students in 613 present the results of their evaluation work, including any data collected on behalf of the client. This “final evaluation presentation” and accompanying report follow the CDC evaluation framework and evaluation standards of practice. The entire project is intended to be an application of stakeholder engagement, research methods and data collection, and data reporting skills learned throughout the student’s entire curriculum of study. The students present their findings to the client and other key stakeholders in the form of a PowerPoint or Vizio presentation in person or via webinar. The client and relevant key stakeholder(s) provide feedback and help the instructor assess the students’ performance.

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.

We do not allow students to tailor competencies at the individual level.

3) Include the most recent syllabus for each course listed in Template D4-1, or written guidelines for any required elements listed in Template D4-1 that do not have a syllabus.

Please see D4.3 of the ERF to view the syllabi addressing the competencies mentioned in the above tables.

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

Strengths: The SPH has committed to restructuring and enhancing the MPH curriculum under the new criteria. The SPH has completed curricular changes and assessment plans addressing the new criteria.

Weaknesses: The MPH program is in initial phases of collecting additional student learning feedback to include the new criteria.

Plans: The MPH Program will pilot the new assessment management system in SOLE during the 2019-2020 school year.

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 demonstrates and allows assessment of competency attainment. It must include at least two products. Examples include written assignments, projects, videos, multi-media presentations, spreadsheets, websites, posters, photos or other digital artifacts of learning. Materials may be produced and maintained (either by the school or by individual students) in any physical or electronic form chosen by the school.

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

Prior to Fall 2019, students completed a work plan agreement which included an overview of the site and project(s) and competencies (minimum five foundational and disincline specific) they aimed to attain during their 180 hours of field work with an approved agency or organization. The work plan also included specific activities that would contribute to achieving the competencies and a measurable final product. The work plan was reviewed and signed by the student, preceptor, faculty mentor and the Director of Practice.

Students were then enrolled in PUBH 622 for a minimum of three credit hours (60 field hours=1 credit hour). Students completed monthly and final field reports as well as a final evaluation at the conclusion of their hours. Students self-identified competencies attained in their final report. Preceptors evaluated the students based on competency attainment, work ethic and demonstration of skills. The Director of Practice assigned grades based on student reports, review of products and the preceptor evaluations.

A new ad hoc committee dedicated to the integrity of and compliance with standards associated with the Applied Practice Experience, Interprofessional Education and Integrated Learning Experience was developed in Fall 2019. Students must now complete an applied practice proposal, which is approved by their site preceptor, practice committee and Director of Public Health Practice before they can register for practicum experience credit (PUBH 630). The Applied Practice Experience Proposal is a formal, typed document identifying the agency/organization, its mission, the preceptor, and a brief description of the proposed project(s). The proposal should identify five competencies that will be applied during the practice experience. Three of the five competencies must be foundational. Each of the selected competencies must be paired with a deliverable/product. Work activities are activities that support the creation and completion of products for the organization's use.

Before students are awarded a grade for PUBH 630, they must post their progress reports, work logs, and final products to their portfolio. Successful completion of proposal objectives as documented by student deliverables will undergo two types of assessment. First, the preceptor evaluation will serves as one form of assessment of competency attainment, documenting the students completed work and that work products were shared with the organization. In addition, the practice committee will use a

standard scoring rubric to assess attainment of competencies related to quality of deliverables submitted through the portfolio.

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

Please see section D5-2 of the ERF for syllabi and handbooks.

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.

Table D5-1.1: Practice-based products that demonstrate MPH competency achievement : Biostatistics	
Student 1 (KP)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Developed and ran SAS programs for data validation for clinical trials	4. Interpret results of data analysis for public health research, policy, or practice
Developed database for chronic illnesses initiatives within WV Health Connection	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
Standard Operating Procedure review	20.Describes the importance of cultural competence in communicating public health content
Final Report	21. Performs effectively on interprofessional teams
PowerPoint and Presentation to stakeholders	22. Apply systems thinking tools to a public health issue
	BIOS-Manage data structures efficiently using standard statistical software (SAS, Excel)

Table D5-1.2: Practice-based products that demonstrate MPH competency achievement : Epidemiology	
Student 1 (AH)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
A Report of Cryptosporidiosis Among Eastern West Virginia Residents from January of 2014-April 2019	1. Apply epidemiological methods to the breadth of settings and situations in public health practice
Presentation of report at monthly meeting of state epidemiologists and at the 2019 WVRHA conference	4. Interpret results of data analysis for public health research, policy or practice
	19.Communicate audience appropriate public health content, both in writing and through oral presentations
	EPI-Weigh public health problems in terms of magnitude, person, time and place
	EPI-Measure occurrences of incidence, morbidity and mortality
Student 2 (EL)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Quantitative analysis of occupational injuries in the logging industry, including geographic and temporal trends.	3. 1. Analyze quantitative and qualitative data using biostatistics, informatics, computer- based programming and software, as appropriate
Qualitative analysis of survey and interview data from logging workers and logging company owner/operators	
Results section of an academic paper	
	22. Apply systems thinking tools to a public health issue
	EPID-Summarize concepts of causation
	EPID-Derive appropriate inferences from epidemiologic data
Student 3 (MC)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Systematic review paper as first author on the respiratory conditions associated with dentistry *A systematic review of malignant and non-malignant respiratory diseases in dental personnel*	4. Interpret results of data analysis for public health research, policy or practice
Presented project in the NIOSH monthly Field Studies branch meeting.	19. Communicate audience-appropriate public health content, both in writing and through oral presentation

Created table of data extraction	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	EPID-Derive appropriate inferences from epidemiologic data
	EPID-Weight a public health problem in terms of magnitude, person, time and place
	EPID-Compare and contract epidemiologic study designs

Table D5-1.3: Practice-based products that demonstrate MPH competency achievement : Health Policy, Management, and Leadership	
Student 1 (BM)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Measured compliance, such as employee handwashing, through quantitative data recording	4. Interpret results of data analysis for public health research, policy or practice
Inspected hospital construction sites and determine if up to code	18. Select Communication strategies for different audiences and sectors
Tracked patient re-admittance within 31 days	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
Final Report	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	HPML-Develop a fundamental understanding of the process of the production and delivery of health policy and its outputs.
	HPML-Acquire the skills to effectively work within the healthcare/health policy system to assist in the formulation and articulation of health care management structures and processes, and work for its efficient and equitable delivery
Student 2 (MS)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Developed and proposed new policy. Collect, analyze, and present outcomes	4. Interpret results of data analysis for public health research, policy or practice
Collect, analyze, and present outcomes	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
Power Point Presentation	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	HPML-Develop a fundamental understanding of the process of the production and delivery of health policy and its outputs
	HPML-Acquire the skills to effectively work within the healthcare/health policy system to assist in the formulation and articulation of health care management structures and processes, and work for its efficient and equitable delivery.
Student 3 (MH)	

Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
	4. Interpret results of data analysis for public health research, policy or practice
	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
	22. Apply systems thinking tools to a public health issue
Student 4 (MJ)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Updated CHHD Community Health Assessment (CH)	4. Interpret results of data analysis for public health research, policy, or practice
Presentation of Community Health Assessment (CHA) Research and Analysis at the WV Rural Health Association conference	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
Delivered two primary prevention programs	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	HPML-Develop an understanding of the processes and applications of influence whereby an individual empower a group to achieve common goals
Student 5 (KW)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Power Point and Poster creation/ presentation	4. Interpret results of data analysis for public health research, policy, or practice
Final paper and manuscript	10. Explain basic principles and tools of budget and resource management
Finalized budget	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
	21. Performed effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	HPML-Acquire the skills to effectively work within the healthcare/health policy system to assist in the formulation and articulation of health care management structures and processes, and work for its efficient and equitable delivery.

Table D5-1.4: Practice-based products that demonstrate MPH competency achievement : Occupational and Environmental Health Sciences	
Student 1 (KK)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Drafted two original policies-Nail Guns, Panel Saws	4. Interpret results of data analysis for public health research, policy, or practice
	22. Apply systems thinking tools to a public health issue
	OEHS-Discern appropriate methods for the control of occupational hazards
Created educational materials (Power Point) on safety & hazard prevention	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
	OEHS-Assess methodologies of primary and secondary prevention for environmental health issues
Assisted in Air Sampling (Air, Ergonomic and Noise Quality)	OEHS-Assess the potential for problems in an occupational or environmental setting
Field Report	
Student 2 (JG)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Organized emergency preparedness drill	4. Interpret results of data analysis for public health research, policy, or practice
Emergency response procedures manual	15. Evaluate policies for their impact on public health and health equity
Developed and presented fire safety training	18. Select communication strategies for difference audiences and sectors
	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
	21. Performed effectively on interprofessional teams
	OEHS-Discern appropriate methods for the control of occupational hazards
	OEHS-Assess the potential for problems in an occupational or environmental setting

Table D5-1.5: Practice-based products that demonstrate MPH competency achievement : Social Behavioral Sciences	
Student 1 (AF)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Report*: Encouraging Healthy Eating and Supporting Local Food Systems for West Virginia Kids: The Power of Produce (POP) Club at the Bridgeport Farmer's Market*	9. Design a population-based policy, program, or intervention
Passport to Health	10. Explain basic principles and tools of budget and resource management 16. apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
Evaluation of POP Club 2019	19.Communicate audience appropriate public health content, both in writing and through oral presentations
	21. Perform effectively on interprofessional teams
	SBS-Organize interventions, including the assessment, planning, implementation and evaluation of public health intervention
Student 2 (CM)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Developed Fatherhood program service delivery, including training and costs.	4. Interpret results of data analysis for public health research, policy, or practice
Report: The Effect of Fatherhood on Health Outcomes	19.Communicate audience appropriate public health content, both in writing and through oral presentations
Created Information sheet for well-male examinations	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	SBS Recommend interventions
Student 3 (CC)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Presentation of resources to stakeholders	4. Interpret results of data analysis for public health research, policy, or practice
Research summary	7. Assess population needs, assets and capacities that affect communities' health
Final Report	13 Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
Power Point & Presentation of Research Summary to stakeholders	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue

	SBS-Communicate effectively among diverse stakeholders
	SBS-Appraise qualitative and quantitative data used in evaluating factors associated with improving public health
	SBS-Recommend interventions likely to improve public health
	SBS-Practice community engagement principles
Student 4 (LC)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Created and disseminated 300 coloring books for Haitian children written in Creole with messages of positive oral health	4. Interpret results of data analysis for public health research, policy, or practice
Literature Review, interviewed local residents in Haiti to collect data for development of oral health survey	19.Communicate audience appropriate public health content, both in writing and through oral presentations
Final Report	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	SBS-Develop communication skills
	SBS-Practice community engagement principles
	SBS-Appraise qualitative and quantitative data
	SBS-Recommend Interventions
Student 5 (CB)	
Specific products in portfolio that demonstrate application or practice^	Competency as defined in Criteria D2 and D4*
Developed Strategic Framework for Youth Outreach Committee	4. Interpret results of data analysis for public health research, policy, or practice
Created infographics & handouts	7. Assess population needs, assets and capacities that affect communities' health
Organized Faith Based Symposium regarding opioid epidemic	13 Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
Created community resource list	19.Communicate audience appropriate public health content, both in writing and through oral presentations
Final Report	20.Describes the importance of cultural competence in communicating public health content
	21. Performs effectively on interprofessional teams
	22. Apply systems thinking tools to a public health issue
	SBS-Develop communication skills
	SBS-Practice community engagement principles
	SBS-Appraise qualitative and quantitative data
	SBS-Recommend Interventions

Because of the transition to new accreditation criteria and a new Director of Public Health Practice in 2018, there are deficiencies in materials and documentation. The SPH can provide five completed work plan documents, final reports and evaluations for some disciplines, but not all. Beginning Fall 2019, the School will begin to collect portfolio products under the revised plan described above.

Please see section D5 of the ERF to view a sample of student practice related materials.

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

Strengths: The strengths include strong preceptors and sites and the hiring of a new Director of Public Health Practice.

Weaknesses: Student materials and documentation before Fall 2018 have deficiencies and areas that were undergoing improvement. Since the hire of a new Director of Public Health practice in Fall 2018, the SPH has been reviewing previous practices and developing improved processes to ensure compliance with CEPH criteria. New and refined protocols have been developed to enhance the applied practice experience and expand the portfolio cross-curricular. A new ad hoc committee dedicated to the integrity of and compliance with standards associated with the Applied Practice Experience, Interprofessional Education and Integrated Learning Experience was developed in Fall 2019. Other weaknesses include the lack of portfolios and the lack of a full-time MPH director.

Plans: Provide additional training for preceptors.

D6. DrPH Applied Practice Experience

This criterion is 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.

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.

Table D7-1: MPH Integrative Learning Experience for All MPH Concentrations

Integrative learning experience (list all options)	How competencies are synthesized
BIOS 629 - (2 Credits) EPID 629 - (2 Credits) HPML 629 - (2 Credits) OEHS 629 - (1 Credit) SBHS 629 - (2 Credits)	The capstone project is assessed using the ILE rubric by the capstone instructor based on the goals indicated in the project plan. The instructor evaluates the student's product (i.e.: paper, oral presentation, poster presentation) to ensure that he/she demonstrated synthesis of the foundational and concentration competencies as identified in the project plan.

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

Since 2017, the MPH integrative learning experience has blended foundation and concentration competencies which is demonstrated at the end of program completion for each of our five core disciplines. The SPH utilized the capstone as its integrated learning experience for the MPH program.

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

Please see D7 of the ERF for syllabi related student's integrative learning experience.

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.

Please see D7 of the ERF for syllabi (with rubrics) related to the student integrative learning experience.

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.

Please see D7 of the ERF for student examples.

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

Strengths: Students' culminating experience is being evaluated/judged by respective faculty in the students' area of concentration. This helps to ensure that students are synthesizing foundation and concentration competencies in the final product.

Weaknesses: None noted

Plans: n/a

D8. DrPH Integrative Learning Experience

This criterion is not applicable.

D9. Public Health Bachelor's Degree General Curriculum

The overall undergraduate curriculum (e.g., general education, liberal learning, essential knowledge and competencies, etc.) introduces students to the domains. The curriculum addresses these domains through any combination of learning experiences throughout the undergraduate curriculum, including general education courses defined by the institution as well as concentration and major requirements or electives.

- the foundations of scientific knowledge, including the biological and life sciences and the concepts of health and disease
- the foundations of social and behavioral sciences
- basic statistics
- the humanities/fine arts

1) List the coursework required for the school's bachelor's degree.

The Bachelor of Science in Public Health degree at West Virginia University requires that students successfully complete 120 credit hours. This includes the following elements:

WVU General Education Foundational Requirements (GEFs)

West Virginia University requires all undergraduate students to complete 31 – 37 credit hours of coursework from the General Education Foundation, https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/2019-2020-gef-courses, (GEF, 2019-20) course list, as part of the University's degree requirements. The categories are:

1) Composition and Rhetoric (3 – 6 credit hours)
2) Science and Technology (4 – 6 credit hours)
3) Mathematics and Quantitative Reasoning (3-4 credit hours)
4) Society and Connections (3 credit hours)
5) Human Inquiry and the Past (3 credit hours)
6) Arts and Creativity (3 credits)
7) Global Studies and Diversity (3 credit hours)
8) Focus Area (9 credit hours) (replaced by minor in Public Health major.

Required Courses for the Public Health Major (AY 2018-19 and 2019-20)

Public Health majors are required to complete 17 credit hours of core foundational courses, 15 credit hours of discipline-specific courses, 7 credit hours of field placement and capstone, 15 credit hours of courses in a selected Area of Emphasis, and a minor of their choosing.

Areas of Emphasis

Students are required to complete a 15 credit hour Area of Emphasis as part of their degree program and may select from three offered:

2) Community and Population Health: Prepares students for entry-level positions in program management and community health education, as well as entry into graduate programs in the social sciences, policy and administration, and public health graduate programs.
3) Public Health Sciences: Prepares students for entry-level positions dealing with occupational and environmental health, as well as entry into graduate programs in public health sciences or clinical professional degree programs.

4) Patient Navigation: Prepares students to become members of health care teams that help individuals overcome barriers to quality care, including access, literacy, transportation and more. Patient Navigators (PNs) assist individuals in reducing and eliminating barriers to health care access and in negotiating complex health delivery systems.

Field Placements and Capstone

Students complete a 1 credit hour Field Placement and Capstone Preparation Seminar (PUBH 400) in the semester prior to registering for the field placement course. This prepares them for their field placement by providing oversight for resume development and introductions to sponsor community agencies. The Public Health Field Placement and Capstone course (PUBH 481 for all but Patient Navigation Students, who complete Agency Rotations [PUBH 486] rather than a Field Placement) requires students to complete 75 hours with a local public/community health agency during their final semester in the Public Health program. The Capstone is embedded in this course and comprises a poster detailing their field placement experience, reflections and outcomes presented to faculty, staff, community partners, and students.

2) Provide official documentation of the required components and total length of the degree, in the form of an institutional catalog or online resource. Provide hyperlinks to documents if they are available online, or include copies of any documents that are not available online.

The Public Health degree requirements can be found in the WVU 2019-20 Undergraduate Catalog, http://catalog.wvu.edu/undergraduate/schoolofpublichealth/publichealth/#majortext.

Required Major Courses and Program Requirements AY 2018-19 & 2019-20

Core Foundational Courses (total cr hrs: 17 Cr Hs

☐PUBH 101	Introduction to Public and Community Health	3
☐PUBH 200	Introduction to Public Health Careers and Information	1
☐PUBH 201	Global Perspectives in Public Health	3
☐PUBH 202	Social Determinants of Health	3
☐PUBH 205	Writing for Public Health Audiences	3
☐PUBH 241	Biological Basis of Public Health (pre-requisite: BIOL 101 & 103)	3

Required Major Courses: Discipline Specific Public Health Courses (credit hours: 15)

☐PUBH 211	Biostatistics for Population Health (pre-req: MATH 121 or higher)	3
☐PUBH 222	Epidemiology for Population Health	3
☐PUBH 243	Issues in Environmental Health	3
☐PUBH 331	Introduction to Health Policy	3
☐PUBH 352	Introduction to Social and Behavioral Sciences and Practice	3

Required Major Courses: Field Experience and Capstone Courses (credit hours: 7)

☐PUBH 400	Field Placement and Capstone Preparation Seminar	1
☐Field Placement and Capstone (complete one)		
Option 1: PUBH 481	Public Health Field Experience and Capstone	6
Option 2: PUBH 486	Pat Nav Experiential Agency Rotations & Capstone (PN AOE only)	6

Areas of Emphasis (AoE): Credit Hours = 15 (students must select one)

Public Health Science Area of Emphasis (PHS AoE)

☐PUBH 311	Data Management for Health Research	3
☐PUBH 494/393	Introduction to: Outbreak Investigation or Injury Prevention)	3
☐PUBH 423	Introduction to Epidemiological Research	3
☐PUBH 442	Health in the Workplace	3
☐PUBH	Public Health Elective (must be a PUBH course)	3

Community & Population Health Area of Emphasis (CHP AoE)

☐PUBH 353	Mastering Health and Wellness (previously CHPR 305)	3
☐PUBH 338	Introduction to Project Management	3
☐PUBH 454	Introduction to Public Health Research Methods	3

☐PUBH 460	US Healthcare System: Structures and Incentives	3
☐PUBH	Public Health Elective (must be a PUBH or CHPR course)	3
Proposed: Patient Navigator Area of Emphasis (PN AoE)		
☐PUBH 260	Intro to Patient Navigation	3
☐PUBH 360	Health Navigation: Prevention & Community Health	3
☐PUBH 361	Health Insurance for Patient Navigators	3
☐PUBH 460	US Healthcare System: Structures and Incentives	3
☐PUBH 461	Legal & Ethical Issues for Patent Navigators	3

Minor: Credit Hours = 15 – 18 (students may select any minor)
Required Community Service Hours = 50 hours (pro-rated to 6.5 per semester in program)
Open Electives Credit Hours: 20 to 29 (dependent on GEF and minor selected)

Total Credit Hours 120

Revisions were made to the undergraduate public health curriculum for the 2017-18 Academic Year in order to broaden the breadth of public health knowledge and increase marketable skills in students, and to better meet CEPH requirements. We organized the revision by regrouping and adding courses “required public health courses” to “core foundation” and “discipline specific” courses. (see Program Requirement sheets in section D9 of the ERF) The revisions made remain the same for both AY 2018-19 and 2019-20. Please see a summary of revisions below.

Type of Change	2017-18	2018 – 2020	Credit hours	Change in credits
Course number change	PUBH 199	PUBH 191	1 cr	none
Add new course		PUBH 200	1 cr	Plus 1
Add new course		PUBH 400	1 cr	Plus 1
Move course to discipline-specific from CPH AOE		PUBH 352	3 cr	Plus 3
Add new course to core foundational		PUBH 205	3 cr	Plus 3
Replace course in PHS AOE	CHPR 440	PUBH 393 A or B	3 cr	none
Course number change in CPH AOE	CHPR 305	PUBH 353	3 cr	none
Replace course in CPH AOE with new course	PUBH 352 (moved to discipline specific)	PUBH 338	3 cr	none

3) Provide a matrix, in the format of Template D9-1, that indicates the courses/experience(s) that ensure that students are introduced to each of the domains indicated. Template D9-1 requires the school to identify the experiences that introduce each domain.

Table D9-1	
Domains	Courses and other learning experiences through which students are introduced to the domains specified
Science: Introduction to the foundations of scientific knowledge, including the biological and life sciences and the concepts of health and disease	4 – 6 credit hours in GEF Area 2, Science and Technology: Public Health majors are required to complete General Biology and its lab (BIOL 101 and 103) (pre-requisites for PUBH 241) Biological Basis of Public Health (PUBH 241, 3 cr), a required core foundational course
Social and Behavioral Sciences: Introduction to the foundations of social and behavioral sciences	3 credit hours in GEF Area 4, Society and Connections (student select course from list). Social Determinants of Health (PUBH 202, 3 cr), a core foundational course and Introduction to Social and Behavioral Sciences and Practice (PUBH 352, 3 cr), a discipline-specific course
Math/Quantitative Reasoning: Introduction to basic statistics	3 – 4 credit hours in GEF Area 3, Mathematics and Quantitative Reasoning: PUBH majors are required to complete Introductory Concepts of Mathematics (MATH 121 or higher, 3 cr) (pre-requisite for PUBH 211) Biostatistics for Population Health (PUBH 211), a discipline-specific course
Humanities/Fine Arts: Introduction to the humanities/fine arts	3 credit hours in GEF Area 6, Arts and Creativity (students select course from list)

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

Strengths: All students complete a minimum of 120 credit hours and all program requirements, and are introduced to the domains listed.

Weaknesses: None.

Plans:
Proposed Program Revision for AY 2020-21

WVU General Education Foundational Requirements (GEFs)

No changes to General Education Foundation Requirements; this remains at 31 – 37 credit hours of coursework.

Required Courses for the Public Health Major (AY 2020-21)
Rationale

The course requirements for the public health major and its Areas of Emphasis are being updated to better integrate knowledge and skills needed for the digital economy and to provide students with additional marketable skills. These revisions also allows students to select public health content areas in which they are interested, through the inclusion of electives.

Proposed Program Revisions

Revised Program Learning Outcomes

Bachelor of Science in Public Health

This program provides an undergraduate education that:

1. Supplies a strong foundation of knowledge about the history, philosophy, core values, concepts, and functions of public health in the US and globally. (*overview)*
2. Allows students to determine appropriate public health processes, approaches, and interventions needed to address health-related needs and concerns of specific populations. *(population health)*
3. Instills the capacity to understand how socio-economic, behavioral, biological, and environmental factors impact human health, contribute to health disparities, and can be effected by promotion and protection programs. (d*eterminants of health*)
4. Provides the skills needed to communicate public health information to diverse audiences through a variety of mediums. *(communication)*
5. Presents the framework necessary for evidence-based and ethical approaches to identifying, collecting, using, analyzing, and disseminating public health data and information. *(information)*
6. Delineates the basic concepts of legal, ethical, economic, and regulatory dimensions of health influence the US health system and public health policy. *(policy and US government)*

The Public Health major program remains at 120 credit hours. The core curriculum is being revised from
32 credits to 37 credits, with 37 credits: 22 credits of Public Health Foundation courses plus 15 credits of Public Health electives (9 credits form Discipline-specific courses [Group A] and 6 credits from Issues in Public Health electives [Group B]).

Areas of Emphasis

Each Area of Emphasis will remain at 15 credits, but these will all be specific courses, as opposed to the current requirements of 12 credits plus one a public health elective.

The **Community and Population Health Area of Emphasis** is being revised so that these students will be eligible to become Community Health Education Specialists (CHES) upon graduation and successful completion of the CHES exam. The National Commission for Health Education Credentialing [NCHEC] eligibility requirements include completion of a bachelor's degree and 25 credits that address the National Commission for Health Education Credentialing [NCHEC] Responsibilities, Competencies, and Sub-Competencies for Health Education Specialists.

Community and Population Health Area of Emphasis

This AOE provides knowledge and skills that:

1. Allow students to demonstrate the key aspects of communicating, promoting and advocating for health.
2. Provide students with the ability to apply appropriate theories, methods, strategies, and policies to health protection and promotion programs that target specific populations.

The **Public Health Sciences Area of Emphasis** was revised to improve basic knowledge of human and public health biology and how it applies to both environmental and occupational health.

Public Health Sciences Area of Emphasis

This AOE provides knowledge and skills that:

1. Provide the ability to recognize how biological, environmental, and occupational factors impact the health status of individuals and populations.
2. Allows for the application of biostatistical and epidemiologic methods to identify and analyze public health issues.

The **Patient Navigation Area of Emphasis** is being revised to better meet the needs identified by WVU Medicine and to better prepare students to be part of a clinical enterprise.

Patient Navigation Area of Emphasis

This AOE provides knowledge and skills that:

1. Encourages students to develop effective communication skills with all members of the patient care team, including those that may not traditionally be included in this team (e.g., social workers, food pantries, transportation, childcare)
2. Provide an understanding of how quality of life and care can be improved via multiple systems and processes.
3. Allows for the implementation of chronic disease management techniques and constructs.

Required Minor

We will be dropping our requirement of a minor due to the increasing difficulty of students being able to register for these courses and to fit them into their schedules. We will continue to recommend minors in place of GEF Area 8 requirements, but it will no longer be required.

Field Placement and Capstone Requirements

While the total credits (7 credits) required for these experiences will remain the same, these courses are being spilt into separate courses for easier administration. They comprise the following:

- PUBH 400, Field Placement Preparation Seminar (1 cr)
- PUBH 481, Public Health Field Experience OR PUBH 486, Patient Navigation Agency Rotation (4 cr)
- PUBH 489, SPH Undergraduate Capstone (2 cr)

D10. 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 D10-1, that indicates the courses/experience(s) that ensure that students are exposed to each of the domains indicated. Template D10-1 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."

Course Name and Number for Table D10-1

PUBH 101 - Introduction to Public and Community Health	PUBH 353 - Mastering Health and Wellness
PUBH 191 - First-Year Seminar	PUBH 360 - Health Navigation: Prevention and Community Health
PUBH 200 - Intro to Public Health Careers & Info	PUBH 361 - Health Insurance for Patient Navigators
PUBH 201 - Global Perspective of Public Health	PUBH 393 - Climate Change and Public Health (new number PUBH 337)
PUBH 202 - Social Determinants of Health	PUBH 393: Introduction to Injury Control and Prevention
PUBH 205 - Writing for Public Health Audiences	PUBH 393 - Introduction to Outbreak Investigation
PUBH 211 - Biostatistics for Population Health	PUBH 400 - Field Placement & Capstone Preparation Seminar
PUBH 222 - Epidemiology for Population Health	PUBH 423 - Introduction to Modern Epidemiologic Research
PUBH 241 - Biological Basis of Public Health	PUBH 442 - Public Health in the Workplace
PUBH 243 - Issues in Environmental Health	PUBH 454 - Introduction to Public Health Research Methods
PUBH 260- Principles of Health Navigation	PUBH 460 - The US Healthcare System: Structures and Incentives
PUBH 311 - Data Management and Reporting	PUBH 461 - Legal and Ethical Issues for Patient Navigators
PUBH 331 - Introduction to Health Policy	PUBH 481- Public Health Field Experience and Capstone (CPH & PHS AOEs, 6 cr)
PUBH 334 - Emergency Preparedness	PUBH 486 - Patient Navigator Experiential Agency Rotations and Capstone (6 cr)
PUBH 338 - Public Health Project Management	PUBH 491 - Professional Field Experience (old CPH & PHS AOEs, 3 cr)
PUBH 352 - Introduction to Social and Behavioral Science and Practice	PUBH 586 - Public Mental Health

Table D10-1: Public Health Bachelor's Degree Foundational Domains																								
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																								
Domains	Course Name and Number																							
	PUBH 101 - Introduction to Public and Community Health	PUBH 200 - Intro to Public Health Careers & Info	PUBH 201 - Global Perspective of Public Health	PUBH 202 - Social Determinants of Health	PUBH 205 - Writing for Public Health Audiences	PUBH 211 - Biostatistics for Population Health	PUBH 222 - Epidemiology for Population Health	PUBH 241 - Biological Basis of Public Health	PUBH 243 - Issues in Environmental Health	PUBH 260 - Principles of Health Navigation	PUBH 331 - Introduction to Health Policy	PUBH 334 - Emergency Preparedness	PUBH 352 - Introduction to Social and Behavioral Science and Practice	PUBH 353 - Mastering Health and Wellness	PUBH 360 - Health Navigation: Prevention and Community Health	PUBH 393 - Climate Change and Public Health	PUBH 393 - Introduction to Injury Control and Prevention	PUBH 393 - Introduction to Outbreak Investigation	PUBH 423 - Introduction to Modern Epidemiologic Research	PUBH 442 - Public Health in the Workplace	PUBH 460 - The US Healthcare System: Structures and Incentives	PUBH 481- Public Health Field Experience and Capstone (GPH & PHS	PUBH 486 - Patient Navigator Experiential Agency Rotations and	PUBH 491 - Professional Field Experience (old GPH & PHS, AGEs 3 or)
Public Health History	I			I C			C		I		I									C				
Public Health Philosophy	I		C	I			I			I														
Core PH Values		I	I	I C			I			I				C								C	C	C
Core PH Concepts	I	I	I	I C	C	C	C	C	I	I		C		C		C	C	C	C	C	C	C	C	C
Global Functions of Public Health		I	I C	I C							I	C				C		C						
Societal Functions of Public Health	I	I	I C	I C	C					I	I	C	C		C									

Key:

I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.

C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

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																										
Domains	Courses																									
	PUBH 101	PUBH 201	PUBH 202	PUBH 205	PUBH 211	PUBH 222	PUBH 241	PUBH 311	PUBH 331	PUBH 338	PUBH 352	PUBH 353	PUBH 360	PUBH 361	PUBH 393	PUBH 393	PUBH 393	PUBH 400	PUBH 423	PUBH 442	PUBH 454	PUBH 460	PUBH 461	PUBH 481	PUBH 486	PUBH 491	PUBH 586
Basic Concepts of Data Collection	I	I			C	I C		C		C							C		C		C					C
Basic Methods of Data Collection					C	I C		C		C							C		C		C					C
Basic Tools of Data Collection		I C			C	I C		C		C					C		C		C		C					C
Data Usage	I	I	I	C	C	I C	C	C	I C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Data Analysis					C	I C	C	C	C	C	C				C		C		C		C					C
Evidence-based Approaches			I		C	I C		C			C	C									C					C

Key:

I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.

C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

Identifying and Addressing Population Health Challenges: Address the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations																									
Domains	Courses																								
	PUBH 101	PUBH 201	PUBH 202	PUBH 205	PUBH 211	PUBH 222	PUBH 241	PUBH 243	PUBH 260	PUBH 334	PUBH 352	PUBH 360	PUBH 393	PUBH 393	PUBH 393	PUBH 400	PUBH 423	PUBH 442	PUBH 454	PUBH 460	PUBH 461	PUBH 481	PUBH 486	PUBH 491	PUBH 586
Population Health Concepts	I	IC	C		C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Introduction to Processes and Approaches to Identify Needs and Concerns of Populations	I		I		C			I		I	C								C						
Introduction to Approaches and Interventions to Address Needs and Concerns of Populations	I		I	I				I		I	C	C							C						

Key:

I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.

C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course																
Domains	Courses															
	PUBH 101	PUBH 201	PUBH 202	PUBH 205	PUBH 222	PUBH 241	PUBH 243	PUBH 260	PUBH 334	PUBH 352	PUBH 353	PUBH 360	PUBH 393	PUBH 393	PUBH 393	PUBH 442
Science of Human Health and Disease	I	I				C	C	I			C				I	
Health Promotion	I	I	I	C		I	C	C		C	C	C		C	I	C
Health Protection	I	I			I	C	C	C	C				C	C	I	C

Key:

I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.

C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities															
Domains	Courses														
	PUBH 101	PUBH 201	PUBH 202	PUBH 222	PUBH 241	PUBH 243	PUBH 260	PUBH 331	PUBH 334	PUBH 352	PUBH 353	PUBH 360	PUBH 393	PUBH 454	PUBH 461
Socio-economic Impacts on Human Health and Health Disparities	I	I C	C			C	I	C		C	C	C		C	C
Behavioral Factors Impacts on Human Health and Health Disparities	I	I	C				I			C	C			C	
Biological Factors Impacts on Human Health and Health Disparities	I	I C	C	I	C	C	C		C						
Environmental Factors Impacts on Human Health and Health Disparities	I	I C	C		C	C	I		C				C		

Key:
I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.
C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation				
Domains	Courses			
	PUBH 311	PUBH 338	PUBH 352	PUBH 454
Introduction to Planning Concepts and Features	I	C	C	C
Introduction to Assessment Concepts and Features	I	C	C	C
Introduction to Evaluation Concepts and Features	I			C

Key:
I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.
C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

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						
Domains	Courses					
	PUBH 101	PUBH 201	PUBH 331	PUBH 334	PUBH 361	PUBH 460
Characteristics and Structures of the U.S. Health System	I		C	I	C	C
Comparative Health Systems		I	C		C	C

Key:
I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.
C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

Health Policy, Law, Ethics, and Economics: Address the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences and responsibilities of the different agencies and branches of government													
Domains	Courses												
	PUBH 101	PUBH 201	PUBH 202	PUBH 222	PUBH 243	PUBH 260	PUBH 331	PUBH 334	PUBH 361	PUBH 393	PUBH 442	PUBH 460	PUBH 461
Legal dimensions of health care and public health policy		I		I		I	C		C			C	C
Ethical dimensions of health care and public health policy		I	I	I		I	C	C	C			C	C
Economical dimensions of health care and public health policy			I	I			C	C	C			C	C
Regulatory dimensions of health care and public health policy	I			I	I		C	C	C	C	C	C	
Governmental Agency Roles in health care and public health policy	I	I		I	I		C	C	C			C	

Key:
I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.
C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

Table D10-1 continued…

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																											
Domains	Courses																										
	PUBH 191	PUBH 200	PUBH 201	PUBH 202	PUBH 205	PUBH 211	PUBH 222	PUBH 241	PUBH 260	PUBH 331	PUBH 334	PUBH 338	PUBH 352	PUBH 353	PUBH 360	PUBH 393	PUBH 393	PUBH 393	PUBH 400	PUBH 423	PUBH 442	PUBH 454	PUBH 461	PUBH 481	PUBH 486	PUBH 491	PUBH 586
Technical writing		I		I C	C	C			I	C	C	C		C	C								C				
Professional writing	I		C	C	C	C	C	C	C	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Use of Mass Media					I C					I C		C															
Use of Electronic Technology	I		I	C	C	C	I	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Key:

I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.

C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

2) Include the most recent syllabus from each course listed in Template D10-1, or written guidelines, such as a handbook, for any required experience(s) listed in Template D10-1 that do not have a syllabus.

The syllabi can be viewed in section D10 of the ERF.

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

Strengths: All domains are introduced and covered (reinforced) with all students, most with multiple opportunities.

Weakness: None

Plans:

Program Revision AY 2020-21

Public Health Domains	Course Name and Number																						
	PUBH101 - Introduction to Public and Community Health	PUBH191 - First-Year Seminar for Public Health Students	PUBH200 - Intro to Public Health Careers & Info	PUBH201 - Global Perspective of Public Health	PUBH202 - Social Determinants of Health	PUBH205 - Writing for Public Health Audiences	PUBH211 - Biostatistics for Population Health	PUBH222 - Epidemiology for Population Health	PUBH 230: Introduction to Health Administration	PUBH233 - The US Healthcare System: Structures and Incentives	PUBH241 - Biological Basis of Public Health	PUBH243 - Issues in Environmental Health	PUBH258 - Terminology and Communication for Health Professionals	PUBH260- Principles of Health Navigation	PUBH311 - Data Management and Reporting	PUBH 325: Introduction to Injury Control and Prevention	PUBH331 - Introduction to Health Policy	PUBH334 - Emergency Preparedness	PUBH337 - Climate Change and Public Health	PUBH338 - Public Health Project Management	PUBH352 - Introduction to Social and Behavioral Science and Practice	PUBH353 - Mastering Health and Wellness	PUBH360 - Health Navigation: Prevention and Community Health	PUBH400 - Field Placement Preparation Seminar	PUBH423 - Introduction to Modern Epidemiologic Research	PUBH3427 - Introduction to Outbreak Investigation
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	I				I C			C				I						I										
Public Health Philosophy	I			C	I			I						I														
Core PH Values			I	I	I C			I						I									C					
Core PH Concepts	I		I	I	I C	C	C	C	I	C	C	I		I		C		C	C			C			C	C		
Global Functions of Public Health			I	I C	I C				I									I	C	C							C	
Societal Functions of Public Health	I		I	I C	I C	C			I					I				I	C			C		C				

Role and Importance of Data in Public Health: Address the basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice																												
Basic Concepts of Data Collection	I			I			C	I C	I						C					C					C	C
Basic Methods of Data Collection							C	I C							C					C					C	C

	Basic Tools of Data Collection				I C			C	I C	I						C				C	C					C	C
	Data Usage	I			I	I	C	C	I C	I	C	C		C		C	C	I C		C	C		C	C	C	C	C
	Data Analysis							C	I C			C				C		C		C	C	C				C	C
	Evidence-based Approaches					I		C	I C	I						C						C	C				
Identifying and Addressing Population Health Challenges: Address the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major																												

health-related needs and concerns of populations																												
Population Health Concepts	I			IC	C		C	C		C	C	C		C		C			C		C		C	C	C	C	
Introduction to Processes and Approaches to Identify Needs and Concerns of Populations	I				I		C		I			I						I			C						

	Introduction to Approaches and Interventions to Address Needs and Concerns of Populations	I				I	I						I						I			C		C			
Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course																												
	Science of Human Health and Disease	I			I							C	C		I								C					I

	Health Promotion	I			I	I	C			I		I	C		C		C					C	C	C			I
	Health Protection	I			I				I	I		C	C		C		C		C	C							I
Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities																												
	Socio-economic Impacts on Human Health and Health Disparities	I			I C	C							C		I			C				C	C	C			

	Behavioral Factors Impacts on Human Health and Health Disparities	I			I	C								I						C	C				
	Biological Factors Impacts on Human Health and Health Disparities	I			I C	C			I			C	C		C				C							
	Environmental Factors Impacts on Human Health and Health Disparities	I			I C	C						C	C		I				C	C						

Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation																											
Introduction to Planning Concepts and Features															I					C	C						
Introduction to Assessment Concepts and Features															I					C	C						
Introduction to Evaluation Concepts and															I					C	C						

	Features																											
Overview of the Health System: Address the fundamental characteristics and organizational structures of the U.S. health system as well as to the differences in systems in other countries																												
	Characteristics and Structures of the U.S. Health System	I								C	C			C				C	I									
	Comparative Health				I					I	C			C				C										

	Systems																											
Health Policy, Law, Ethics, and Economics: Address the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences and responsibilities of the different agencies and branches of government																												

	Legal dimensions of health care and public health policy				I				I	C	C			C	I			C								
	Ethical dimensions of health care and public health policy				I	I			I	C	C			C	I			C	C							
	Economical dimensions of health care and public health policy					I			I	C	C			C				C	C							
	Regulatory dimensions of health care and public health policy	I							I	C	C		I	C				C	C							C

	Governmental Agency Roles in health care and public health policy	I			I				I	C	C		I	C				C	C									
Health Communications: Address the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology																														
	Technical writing			I		I C	C	C		I					I			C	C		C		C	C			
	Professional writing		I		C	C	C	C	C	I		C			C		C	C		C	C	C	C	C	C	C	C	

	Use of Mass Media						I C												I C			C					
	Use of Electronic Technology		I		I	C	C	C	I			C			C		C	C	C	C	C	C	C	C	C	C	C

Key:
I=introduced: domain introduced: Initial exposure of students to information or skills on new topics, concepts, and/or content.
C=covered: domain covered (reinforced): Strengthening and solidifying previously introduced information, skills, and/or contexts.

D11. 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 D11-1, that indicates the assessment opportunities that ensure that students demonstrate the stated competencies.

Table D11-1.a: Student Assessment Opportunities

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	PUBH 481, Public Health Field Placement and Capstone	Students present a poster, which they have practiced, to a variety of stakeholders.
	PUBH 331, Introduction to Health Policy	Students present a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others.
Written communication	PUBH 205, Writing for Public Health Audiences	Students develop a variety of written pieces including a low literacy flyer, a news release, a public health policy brief and a synthesis paper.
	PUBH 361, Health Insurance for Patient Navigation	Students develop health insurance communications that outline a specific health insurance issue or problem and its proposed resolution.
Communicate with diverse audiences	PUBH 352, Introduction to Social and Behavioral Science and Practice	Students participate in a service project in which they work in teams to engage with community agencies and those the agencies serve.
	PUBH 331, Introduction to Health Policy	Students develop a presentation on a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others and a policy memo describing a current health care problem in WV which will be presented and judged by the WV Department of Health and Human

			Services.
	Communicate through variety of media	PUBH 202, Social Determinants of Health	Students present results of research project via a recorded video on a non-medical social determinant of health
		PUBH 205 Writing for Public Health Audiences	Students develop a variety of written pieces including a low literacy flyer, a news release, a public health policy brief and a synthesis paper.
Information Literacy: Students should be able to locate, use, evaluate and synthesize public health information			
	Locate information	PUBH 201, Global Perspectives of Public Health	Students must locate country-specific public health data for their group global health presentation
		PUBH 393, Climate Change and Public Health	Students must be able to locate continents and countries from a world map.
	Use information	PUBH 241, Biological Basis of Public Health	Students collect information and data on a pertinent topic dealing with public health for a presentation.
		PUBH 331, Introduction to Health Policy	Students participate and debate in a Mock Legislative Hearing.
	Evaluate information	PUBH 423, Introduction to Modern Epidemiologic Research	Students evaluate date and information to inform their disease outbreak presentation.
		PUBH 442, Public Health in the Workplace	Students review a peer-reviewed article on occupational hazards or prevention and evaluate the content, including methods and results.
	Synthesize information	PUBH 205 Writing for Public Health Audiences	Students develop a synthesis paper that takes previous work in the course and requires synthesis of a new message that targets the at-risk population.
		PUBH 454, Introduction to Public Health Research Methods	Students collect and analyze data and information then synthesize epidemiologic frameworks to determine the investigation protocol.

2) Include the most recent syllabus from each course listed in Template D11-1, or written guidelines, such as handbook, for any required elements listed in Template D11-1 that do not have a syllabus.

Please see section D11 of the ERF for the required documents.

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

Strengths: Students are exposed to concepts in public health communication and information literacy throughout the program.

Weaknesses: None

Plans: Proposed Public Health Program revisions for AY 2020-21

Table D11-1.b: Student Assessment Opportunities			
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	PUBH 489, SPH Undergraduate Capstone	Students present a poster, which they have practiced, to a variety of stakeholders.
		PUBH 331, Introduction to Health Policy	Students present a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others.
	Written communication	PUBH 205, Writing for Public Health Audiences	Students develop a variety of written pieces including a low literacy flyer, a news release, a public health policy brief and a synthesis paper.
		PUBH 200, Introduction to Public Health Careers and Information	Students develop a transcript from oral interviews with public health professionals.
	Communicate with diverse audiences	PUBH 352, Introduction to Social and Behavioral Science and Practice	Students participate in a service project in which they work in teams to engage with community agencies and those the agencies serve.
		PUBH 331, Introduction to Health Policy	Students develop a presentation on a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others and a policy memo describing a current health care problem in WV, which will be presented and judged by the WV Department of Health and Human Services.
	Communicate through variety of media	PUBH 202, Social Determinants of Health	Students present results of research project via a recorded video on a non-medical social determinant of health
		PUBH 205 Writing for Public Health Audiences	Students develop a variety of written pieces including a low literacy flyer, a news release, a public health policy brief and a synthesis paper.
Information Literacy: Students should be able to locate, use, evaluate and synthesize public health information			

	Locate information	PUBH 201, Global Perspectives of Public Health	Students must locate country-specific public health data for their group global health presentation
		PUBH 338, Climate Change and Public Health	Students must be able to locate continents and countries from a world map.
	Use information	PUBH 241, Biological Basis of Public Health	Students collect information and data on a pertinent topic dealing with public health for a presentation.
		PUBH 331, Introduction to Health Policy	Students participate and debate in a Mock Legislative Hearing.
	Evaluate information	PUBH 222, Epidemiology for Population Health	Students evaluate data to determine potential populations at risk.
		PUBH 442, Public Health in the Workplace	Students review a peer-reviewed article on occupational hazards or prevention and evaluate the content, including methods and results.
	Synthesize information	PUBH 205 Writing for Public Health Audiences	Students develop a synthesis paper that takes previous work in the course and requires synthesis of a new message that targets the at-risk population.
		PUBH 454, Introduction to Public Health Research Methods	Students collect and analyze data and information then synthesize epidemiologic frameworks to determine the investigation protocol.

This serves as our notice of a substantive change. *See documentation provided in section D11 of the ERF.

D12. 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 D12-1, that identifies the cumulative and experiential activities through which students have the opportunity to integrate, synthesize and apply knowledge as indicated.

Table D12-1: Cumulative and Experiential Activities

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.
PUBH 481 (and 491): Public Health Field Placement and Capstone course (for CPH and PHS AOEs)	Students complete 75 hours with a local public/community health agency during their final semester in the Public Health program. During this experience, students complete a project for the agency and complete activities aligned with learning outcomes. The projects and activities completed allow students to integrate and apply knowledge and skills gained from public health courses. Students engage in experiences that are often unique to them and that provide them with opportunities for synthesis of public health concepts to real world issues. Students sometimes have the opportunity to introduce their community partners to public health concepts. Reflections and class discussion about their experiences and how they are applying skills and knowledge also allows for some discovery.
PUBH 486: Patient Navigation Experiential Agency Rotations and Capstone (for PN AOE)	Students in the Patient Navigation Area of emphasis complete 75 hours in a unit at West Virginia University Medicine. They complete a work agreement and spend their time aligned with members of the clinical care team addressing patient needs and assisting with compliance. The Capstone poster (embedded I the filed placement course) provides students with the opportunity to present on their field experience to stakeholders and allows them to illuminate how their public health courses, skills and knowledge contributed to the completion of their field experience. Students often find new passions and develop new professional goals as a result of their field placements: a direct effect of their community partner, the agency they were placed at, and/or the topic they addressed.

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

Please see section D12 of the ERF to view student examples.

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

Field Placements and Capstone

Students complete a 1 credit hour Field Placement and Capstone Preparation Seminar (PUBH 400) in the semester prior to engaging in their field placements. This course prepares them for their field placement by: providing oversight for resume development and letters of introduction; allowing for completion of HIPAA, ethics and other required training; permitting for processing of background checks (when necessary); completing a developmental session provided by the Office of Diversity Equity and Inclusion on implicit bias and working with diverse populations; and introductions and initial meetings with sponsoring community agencies.

The field placement and capstone (culminating experience) is combined into one course. There is one course (PUBH 491) for 3 credits for students in the AY 2017-18 curriculum. We expanded the requirements and credits (to 6) for AY 2018-19 and 2019-10 (PUBH 481 and 486). All three courses require students to complete a minimum number of hours with a local public/community health agency during their final semester in the Public Health program. Students write guided reflections and meet to discuss their experiences three times during their field experiences. PUBH 491 for 3 credits requires the completion of 60 hours of placement, while PUBH 481 and 486 require 75 hours and more extensive reflections. Audra Hamrick, the Director of Public Health Practice and Service Learning, coordinates and oversees all coursework and activities aligned with student field placements. PUBH 481 will be offered for the first time in the spring: we have not yet had students in this curriculum to the point where they needed this course.

Students in the Community and Population Health Area of Emphasis and the Public Health Sciences Area of Emphasis register for Public Health Field Experience and Capstone (PUBH 481 or 491).

In a unique partnership, the SPH identifies local public and community health agencies for student field placements by partnering with the WVU Center for Service and Learning (CS&L), https://service.wvu.edu/home/about. "The WVU Center for Service and Learning commits to building a campus and community that encourages social action connected to academic success, integrity and growth in civic responsibility." The Center's iServe program, https://iserve.wvu.edu/user/login/?return=%2Fuser%2Fgroups%2F%3Fgroup%3Duur4VuUDphivDAT%2FpTEVaWaTK3Ot172%2BUeU%2B9CLNydbHNUYBn3RG8iWtd%2BX1wml1KTsS95jRyJ%2FNIH8mt6VwJA%3D%3D links students electronically to community partners for the service learning contracts, reporting of hours, and preceptor evaluations.

Students in the Patient Navigation Area of Emphasis register for Patient Navigator Experiential Agency Rotations and Capstone (PUBH 486). Rotations for Patient Navigation students are identified through contacts at WVU Medicine. Students work with clinical care teams to assist patients/individuals in reducing and eliminating barriers to health care access and in negotiating complex health delivery systems.

The Culminating Experience or Capstone is embedded in the Field Placement courses and requires student to develop, practice, and present a poster detailing their field placement experience, reflections, and outcomes. This includes sections on:

a. the agency, their services, service regions and target populations aligned with reflection #1).
b. the issue addressed with a brief background and some information that explains why this is a problem (locally, statewide, nationally, globally), and which includes statistics or data points supporting the scope of the issue (aligns with reflection #1)
c. student contributions, tasks performed and/or activities (aligns with reflection #2)
d. reflection on the experience and how public health courses, knowledge and skills contributed to the experience (aligns with reflections #2 and #3)
e. student's future goals (professional, education, other)

The poster is presented at the end of the student's final semester to a gathering of faculty, staff, community partners, students, alumni, and other stakeholders. The posters are formally graded by SPH faculty (all are invited) using the Poster Presentation Grading Form.

Additional information regarding experiential learning opportunities can be found on our website, https://publichealth.wvu.edu/students/experiential-learning/.

Proposed Program Revision for AY 2020-21

While the total credits (7 credits) required for these experiences will remain the same, these courses are being spilt into separate courses for easier administration. They comprise the following:

- PUBH 400, Field Placement Preparation Seminar (1 cr)
- PUBH 481, Public Health Field Experience OR 486, Patient Navigation Agency Rotation (4 cr)
- PUBH 489, SPH Undergraduate Capstone (2 cr)

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 the D12 ERF to view field placement and capstone syllabi and field placement documents.

Plans:

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.**
PUBH 481: Public Health Field Placement (for CPH and PHS AOEs)	Students complete 75 hours with a local public/community health agency during their final semester in the Public Health program. During this experience, students complete a project for the agency and complete activities aligned with learning outcomes. The projects and activities completed allow students to integrate and apply knowledge and skills gained from public health courses. Students engage in experiences that are often unique to them and that provide them with opportunities for synthesis of public health concepts to real world issues. Students sometimes have the opportunity to introduce their community partners to public health concepts. Reflections and class discussion about their experiences and how they are applying skills and knowledge also allows for some discovery. Students in the Patient Navigation Area of emphasis complete 75 hours in a unit at West Virginia University Medicine. They complete a work agreement and spend their time aligned with members of the clinical care team addressing patient needs and assisting with compliance.
PUBH 486: Patient Navigation Agency Rotation (for PN AOE)	
PUBH 489: SPH Undergraduate Capstone	The Capstone provides students with the opportunity to present (draft poster, practice presentation and final presentation) on their field experiences to stakeholders and allows them to illuminate how their public health courses, skills and knowledge contributed to the completion of their field experience. Students provide information on the agency, their target populations, funding sources, and array of services. They also present data and information on the central issue or focus of their placements and provide context as to the extent of its impact on the community. Students often find new passions and develop new professional goals as a result of their field placements: a direct effect of

	their community partner, the agency they were placed at, and/or the topic they addressed.

D13. 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 D13-1, of the manner in which the curriculum and co-curricular experiences expose students to the concepts identified.

Table D13-1: Courses with Cross-Cutting Concepts and Experiences

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	**Gamma Mu Chapter of Delta Omega Public Health Honorary Society**: Brings undergraduate and graduate public health students together in a variety of public health promotion-based community service activities throughout the academic year **PUBH 331**, Introduction to Health Policy: Students participate and debate in a Mock Legislative Hearing. **PUBH 360**, Health Navigation: Prevention and Community Health: Students in a group to develop an advocacy strategy on a selected health issue. **Dean's Colloquium Series**: Presentations on current public health topics of interest.
Community dynamics	**PUBH 352**, Introduction to Social and Behavioral Science and Practice: Students participate in a service project in which they work in teams to engage with community agencies. **PUBH 481, 491, and 486**, Field Placement and Capstone Courses: Students work on site with community agencies.
Critical thinking and creativity	**Dean's Ambassador Program** student run Instagram account. Students need to come up with Public Health related content to publish to the account. **PUBH 331**: Introduction to Health Policy: Students develop a policy memo describing a current health care problem in WV, which will be presented and judged by the WV Department of Health and Human Services.
Cultural contexts in which public health professionals work	**PUBH 353**, Mastering Health and Wellness: Students develop a health promotion project entitled "Making a Difference" that is relevant to a diverse group of people and aligns with a proposed Health People 2020 goal.
Ethical decision making as related to self and society	**PUBH 202**, Social Determinants of Health: Students present a profile on a Social Determinant of Health that incorporates a student developed model to affect health of targeted populations. **PUBH 461**, Legal and Ethical Issues for Patient Navigators: Students develop a case study that addressed social, legal and ethical issues relevant to the case.
Independent work and a personal work ethic	**PUBH 205**, Writing for Public Health Audiences: All assignments in this course are developed individually and are iterative. **PUBH 481, 491, and 486**, Field Placement and Capstone Courses:

	Students complete and report hours for field placement and individually develop their poster via a draft, practice and presentation.
Networking	**The Student Association of Public Health** (SAPH) plans and hosts one social per semester that focuses on networking SPH Ambassadors set up tables at the Mountainlair every month during the fall and spring semester to network with students and others interested in Public Health. SPH Ambassadors also attend open houses where they interact with interested students and families. **PUBH 200**, Introduction to Public Health Careers and Information: Interview of a public health professional. PUBH students are required to community service (hours aligned with years in the program. WVU Center for Service & Learning presents an annual Community Service Expo that highlights service opportunities with local agencies.
Organizational dynamics	**PUBH 393**, Introduction to Injury Control and Prevention: Students develop a group dynamics report based on group project. **PUBH 338**, Introduction to Project Management: Students completed a project proposal addressing how stakeholders are involved and components are implemented.
Professionalism	**SPH Ambassadors** attend many events (social media account, tables, open houses, and calling campaigns) where they are representing the School of Public Health in a professional manner. **PUBH 400**, Field Placement and Capstone Preparation Seminar: Students complete HIPAA and ethics training, they have a guest lecture speaking on professionalism, and this is detailed in the syllabus. **PUBH 454**, Introduction to Public Health Research Methods: Students graded on participation and professionalism for course activities
Research methods	**PUBH 423**, Introduction to Modern Epidemiologic Research: Students complete a disease outbreak presentation, providing detail on how they would implement the epidemiologic investigation. **PUBH 454**, Introduction to Public Health Research Methods: Students develop an oral presentation of an independent group research investigation.
Systems thinking	**PUBH 331**, Introduction to Health Policy: Students develop a presentation on a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others. .
Teamwork and leadership	**The Student Association of Public Health** (SAPH) plans and hosts a 5K annually during National Public Health Week. Each year, a volunteer committee appointed by the Leadership Group has planned, promoted, organized, and implemented the event. They also volunteer on race day as ambassadors/course guides. **SPH Ambassadors** often work in teams at events. It is important that they know and understand individual member strengths and weaknesses to successfully market SPH programs. **PUBH 202**, Global Perspective of Public Health: Students complete a paper and presentation on specific issues in global health with comparison across countries and continents.

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.

Please see section D13 of the ERF to view syllabi.

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

Strengths: All students have opportunities to concepts and experiences necessary for success in the workplace, further education and lifelong learning.

Weaknesses: None

Plans:

Table D13-1.1: Courses with Cross-Cutting Concepts and Experiences

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	**Gamma Mu Chapter of Delta Omega Public Health Honorary Society**: Brings undergraduate and graduate public health students together in a variety of public health promotion-based community service activities throughout the academic year **PUBH 331**, Introduction to Health Policy: Students participate and debate in a Mock Legislative Hearing. **PUBH 360**, Health Navigation: Prevention and Community Health: Students in a group to develop an advocacy strategy on a selected health issue. **Dean's Colloquium Series**: Presentations on current public health topics of interest.
Community dynamics	**PUBH 352**, Introduction to Social and Behavioral Science and Practice: Students participate in a service project in which they work in teams to engage with community agencies. **PUBH 481, 491, and 486**, Field Placement and Capstone Courses: Students work on site with community agencies.
Critical thinking and creativity	**Dean's Ambassador Program** student run Instagram account. Students need to come up with Public Health related content to publish to the account. **PUBH 331**: Introduction to Health Policy: Students develop a policy memo describing a current health care problem in WV, which will be presented and judged by the WV Department of Health and Human Services.
Cultural contexts in which public health professionals work	**PUBH 353**, Mastering Health and Wellness: Students develop a health promotion project entitled "Making a Difference" that is relevant to a diverse group of people and aligns with a proposed Health People 2020 goal.
Ethical decision making as related to self and society	**PUBH 202**, Social Determinants of Health: Students present a profile on a Social Determinant of Health that incorporates a student developed model to affect health of targeted populations. **PUBH 461**, Legal and Ethical Issues for Patient Navigators: Students

	develop a case study that addressed social, legal and ethical issues relevant to the case.
Independent work and a personal work ethic	**PUBH 205**, Writing for Public Health Audiences: All assignments in this course are developed individually and are iterative. **PUBH 481, 491, and 486**, Field Placement and Capstone Courses: Students complete and report hours for field placement and individually develop their poster via a draft, practice and presentation.
Networking	**The Student Association of Public Health (SAPH)** plans and hosts one social per semester that focuses on networking **SPH Ambassadors** set up tables at the Mountainlair every month during the fall and spring semester to network with students and others interested in Public Health. SPH Ambassadors also attend open houses where they interact with interested students and families. **PUBH 200**, Introduction to Public Health Careers and Information: Interview of a public health professional. **PUBH students** are required to community service (hours aligned with years in the program. WVU Center for Service & Learning presents an annual Community Service Expo that highlights service opportunities with local agencies.
Organizational dynamics	**PUBH 393**, Introduction to Injury Control and Prevention: Students develop a group dynamics report based on group project. **PUBH 338**, Introduction to Project Management: Students completed a project proposal addressing how stakeholders are involved and components are implemented.
Professionalism	**SPH Ambassadors** attend many events (social media account, tables, open houses, and calling campaigns) where they are representing the School of Public Health in a professional manner. **PUBH 400**, Field Placement and Capstone Preparation Seminar: Students complete HIPAA and ethics training, they have a guest lecture speaking on professionalism, and this is detailed in the syllabus. **PUBH 454**, Introduction to Public Health Research Methods: Students graded on participation and professionalism for course activities
Research methods	**PUBH 423**, Introduction to Modern Epidemiologic Research: Students complete a disease outbreak presentation, providing detail on how they would implement the epidemiologic investigation. **PUBH 454**, Introduction to Public Health Research Methods: Students develop an oral presentation of an independent group research investigation.
Systems thinking	**PUBH 331**, Introduction to Health Policy: Students develop a presentation on a component of the WV Policy Landscape that directly affects the WV Opioid crisis to be presented to state legislators, Bureau of Public Health staff and others. .
Teamwork and leadership	**The Student Association of Public Health (SAPH)** plans and hosts a 5K annually during National Public Health Week. Each year, a volunteer committee appointed by the Leadership Group has planned, promoted, organized, and implemented the event. They also volunteer on race day as ambassadors/course guides. **SPH Ambassadors** often work in teams at events. It is important that they know and understand individual member strengths and weaknesses to successfully market SPH programs. **PUBH 202**, Global Perspective of Public Health: Students complete a paper and presentation on specific issues in global health with comparison across countries and continents.

D14. 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 Master of Public Health program at West Virginia University consists of a minimum of 42 credit hours.

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

West Virginia University courses offered for credit are based on semester hours. Semesters are fifteen weeks long plus one week for final exams. A single credit hour is equivalent to fifty minutes per week of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to sixty minutes per week. http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#creditlimitstext

D15. DrPH Program Length

This criterion is not applicable.

D16. 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.

All students are required to complete a minimum of 120 credit hours for the public health bachelor's degree (see WVU Undergraduate Catalog, http://catalog.wvu.edu/undergraduate/schoolofpublichealth/publichealth/#majortext).

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

West Virginia University courses offered for credit are based on semester hours. Semesters are fifteen weeks long plus one week for final exams. A single credit hour is equivalent to fifty minutes per week of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to sixty minutes per week.
http://catalog.wvu.edu/undergraduate/programs_courses__enrollment/#credithourstext

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

The Transfer Equivalency Self Service (TESS) system (https://admissions.wvu.edu/how-to-apply/transfer-students/transferring-course-credit-to-wvu) allows current and future students to see how credit from other institutions will transfer, and how that credit will apply to a degree at WVU. TESS is designed to make the transfer process easier and more transparent. Once a course form another academic institution is approved for equivalent credit, it remains in the system for all students completing the same course. In all cases, the application of transfer credit toward completion of a bachelor's degree is determined by the school or college upon enrollment. The student's academic department will determine which credits will be used to meet degree requirements.

WVU accepts all "college-level courses" from "accepted regionally accredited institutions." Grades and credits are transferable for college-level courses from regionally accredited U.S. institutions. Generally speaking, lab course credit that is earned through self-taught, online or correspondence instruction will not transfer to WVU as laboratory credit. Such credits transfer as open credit or elective credit, and degree programs will decide how to apply the credit to degree requirements.

Credit hours do not change when transferred to WVU. For example, if 3 credit hours were earned in a Computer Science course at another institution and the WVU equivalent course is 4 credit hours, the student will only receive 3 transfer credit hours. However, course credits taken at institutions that are on the quarter system will be adjusted to fit the semester system at WVU.

The Assistant Dean for Undergraduate Studies is designated as the reviewer of all potential course equivalents representative of public health knowledge that are not already in TESS. Students may enter courses (with syllabus) into the Transfer Equivalency Review Request (TERR). The Assistant Dean then reviews the syllabus to determine if at least 70% of the learning outcomes are consistent with an existing public health courses at WVU. If there is compatibility, the course is approved. If

there is less than 70% compatibility, the course is not approved as an equivalent and is added to a student's general electives.

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

There are currently no articulation agreements.

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.

WVU requires all undergraduate degrees to comprise 120 credit hours (http://catalog.wvu.edu/undergraduate/degree_regulations/#requirementstext), unless a greater number is required for discipline-specific accreditation. The BS in Public Health requirements of 120 credit hours is equivalent to the BS in Exercise Physiology (http://catalog.wvu.edu/undergraduate/schoolofmedicine/exphys/#majortext) , a pre-med program at WVU, and the BA in History (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/history/#majortext) .

D17. Academic Public Health Master's Degrees

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 in the context of a population health framework.

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.

Deletions: The Online MPH Program and Online MS in School Health Education Programs no longer admitted students in 2017. This Self-Study reporting coincides with the need to present current information. This serves as our notice of a substantive change (per correspondence with Ally D'Orio*). Due to the "teach out" of remaining students in the program we have not submitted a Substantive Change deleting the program. *See documentation provided in section D17 of the ERF.

Additions: The MS in Biostatistics was formally approved by the WVU Board of Governors in 2015. A Board of Governors review of this program was completed in December 2018. This serves as our notice of a substantive change. *See documentation provided in section D17 of the ERF.

1) List the curricular requirements for each relevant degree in the unit of accreditation.

The MS consists of two years of coursework totaling 36 credit hours. In addition to an extensive methodologically-focused core curriculum, the MS allows students a minimum of 9 credit hours of electives. Students can elect for either a thesis or a non-thesis option, with students in the non-thesis option completing one (1) additional elective course. Courses are detailed below.

Major Requirements

MS Required Courses		
BIOS 610	*Biostatistical Theory and Methods 1*	*4*
BIOS 611	*Data Management and Reporting*	*3*
BIOS 612	*Biostatistical Theory and Methods 2*	*3*
BIOS 620	*Applied Linear Models HS*	*3*
BIOS 621	*Categorical Data Analysis HS*	*3*
BIOS 623	*Biostatistics Careers and Skills*	*2*
PUBH 659	*Public Health Foundations*	*3*
Electives		*9*
BIOS 622	*Analysis of Time-to-Event Data*	
BIOS 662	*Statistics in Clinical Trials*	
BIOS 663	*Introduction to Meta-Analysis*	
STAT 513	*Design of Experiments*	
EPID 601	*Public Health Epidemiology*	
EPID 611	*Concepts and Methods of Epidemiology*	

EPID 612	*Applied Epidemiology for Public Health*	
STAT 521	*Statistical Analysis System Programming*	
STAT 522	*Advanced Statistical Analysis System Programming*	
STAT 523	*Statistical Computing*	
STAT 531	*Sampling Theory and Methods*	
STAT 540	*Introduction to Exploratory Data Analysis*	
STAT 541	*Applied Multivariate Analysis*	
STAT 543	*Bioinformatics Data Analysis*	
STAT 551	*Nonparametric Statistics*	
Or other approved courses		
Choice of Thesis or Non-Thesis Option		*6*
Thesis Option		
BIOS 628	*Biostatistics Practicum*	
BIOS 697	*Research*	
Non-Thesis Option		
BIOS 628	*Biostatistics Practicum*	
Elective		
Total Hours		***36***

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

Table D17-1: Content Coverage for Academic Public Health Master's Degree

Content	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Explain public health history, philosophy and values	PUBH 659: Foundations of Public Health	Module: Background: The Public Health Mission. **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of public health history, philosophy and values into **research summary and summative** class **presentation** is expected.
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 659: Foundations of Public Health	Module: Background: The Public Health Mission. **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of core functions and essential services into research **summary and summative class presentation** is expected.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 659: Foundations of Public Health	Multiple modules, especially Epidemiology (2) and Biostatistics (2). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Explanation of role of quantitative and qualitative methods is reflected in final exam essay questions and the students' summative class **presentations**.

4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2) as well as modules on Epidemiology (2) and Molecular Diagnosis in Public Health (1). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 659: Foundations of Public Health	Students complete a **research summary and annotated bibliography** in which they outline a line of research of interest to them and discuss the proposed area of work in relation to the advancement of public health goals and practice. Students also summarize a minimum of 10 articles related to the research area. Finally, students provide a summative class **presentation** addressing their research area, outcomes from their practice-based experience with vulnerable communities, and a review of the key learning from across the course.
7. Explain effects of environmental factors on a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
8. Explain biological and genetic factors that affect a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3) and Molecular Diagnosis in Public Health (1). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
9. Explain behavioral and psychological factors that affect a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.

10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 659: Foundations of Public Health	Multiple modules on Health Policy, Management and Leadership (2) and Social and Behavioral Sciences (2). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
11. Explain how globalization affects global burdens of disease	PUBH 659: Foundations of Public Health	Multiple modules on Health Policy, Management and Leadership (1) and Social and Behavioral Sciences (2), and Occupational and Environmental Health Sciences (2). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3) and Molecular Diagnosis in Public Health (1). **Weekly lecturer assessment** (1-10 scale) of student comprehension and participation. **Final exam** consists of essay questions covering each content area. Integration of content area expected in summative class **presentation and research summary**.

3) Provide a matrix, in the format of Template D17-2, that lists competencies for each relevant degree and concentration. The matrix indicates at least one assessment activity for each of the listed competencies. 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.

Table D17-2: Assessment of Competencies for Academic Master's Degrees in Public Health Fields (MS in Biostatistics)

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
1. Assess foundational concepts of probability and statistical inference.	BIOS 610: Biostatistical Theory & Methods 1 BIOS 612: Biostatistical Theory & Methods 2	**Students are given regular small assignments** (take-home or in-class) in which they must use common probability distributions to calculate probabilities, derive important results. **In BIOS 610** this may be quantities such as expected values and variances, as well as maximum likelihood estimators. **In BIOS 612** the content will expand to include derivation of basic statistical methods from first principles, and power calculations. In both courses, multiple approaches will be used, including analytical (e.g. via calculus), computational (e.g. numerical methods such as bootstrap or Newton-

		Raphson), and graphical (e.g. visualizing likelihoods).
2. Analyze clinical and public health data using descriptive biostatistical methods.	BIOS 610: Biostatistical Theory & Methods 1 BIOS 612: Biostatistical Theory & Methods 2	**In multiple homework assignments**, students will use a large Public Health database (e.g., NHANES) and apply statistical concepts to describe patterns or investigate claims such as "Does it appear that men and women tend to have different BMI?" or "Does there appear to be an association between blood pressure and BMI?".
3. Distinguish appropriate basic inferential statistical analyses and summarize their results.	BIOS 610: Biostatistical Theory & Methods 1 BIOS 612: Biostatistical Theory & Methods 2	**Students are assigned an open-ended project** in which they must analyze a real-world dataset using topics from the current course. **In BIOS 610**, this may include descriptive summaries, selecting appropriate probability distributions and assessing fit, estimation of parameters, and resampling-based intervals. **For BIOS 612**, this should also include statistical testing and power analysis.
4. Manage standard statistical software to efficiently manage data structures.	BIOS 611: Data Management & Reporting	**Students are assigned a project** in which they will apply statistical reporting methods to manipulate a large Public Health database, creating compelling graphical and tabular summaries to investigate a scientific finding. Results will be compared to published scientific findings. Software used may include R, Python, SAS, SQL, or other current, relevant software as determined by the instructor.
5. Summarize central concepts of statistical theory and inference.	BIOS 610: Biostatistical Theory & Methods 1 BIOS 612: Biostatistical Theory & Methods 2	Students are assigned a statistical concept related to the course content. **For BIOS 610** this may be a new probability distribution, an estimator, or similar, while **for BIOS 612** it may be a statistical test or similar method. The students must research the topic and write a short report on the background and mathematical details of their assigned topic, with a focus on connecting to course content such as expected values, estimators, and methods. They will make a short presentation of their report.
6. Develop appropriate plans to analyze standard continuous data in order to make valid inferences.	BIOS 620: Applied Linear Models	**Exams**: Given information on the continuous dataset (such as statistical program output), interpret model output, determine which model would be preferred (model comparison), and interpret the model in the scientific context. Discuss potential departures from the regression assumptions using diagnostic plots. Discuss various potential modeling strategies if an assumption is violated.
7. Develop appropriate plans to analyze standard categorical data in order to make valid inferences.	BIOS 621: Categorical Data Analysis	**Final Exam** – Take a dataset, construct contingency tables and make appropriate inferences. Model outcome variables (both binary and count data) and summarize the

		results appropriately. Write up as one would a research paper.
8. Communicate effectively, in writing and verbally, with substantive investigators and members of the community when assisting in the design of research studies as well as the results of statistical analyses.	BIOS 628: Biostatistics Practicum	**Final report** – Over the course of the semester, a written report of analysis will be developed in conjunction with input from the substantive investigators and members of the community. Report should be written with a naïve reader in mind with practical and applied explanations of analysis and results. **Final presentation** – The written presentation should also be orally presented to the substantive investigators/community members.
9. Explain each of the five core disciplines in public health and illustrate the ways each of the core disciplines have contributed to the historical evolution of public health.		*NOTE: PROGRAM LEADERSHIP AND FACULTY HAVE INITIATED INTERNAL PROCESSES TO HAVE THIS LEARNING OUTCOME FORMALLY REMOVED AS PUBH 659 NOW ADDRESSES ALL CEPH FOUNDATIONAL COMPETENCIES FOR NON-MPH STUDENTS.*

4) 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.

A comprehensive list of required coursework and potential electives is provided above. In addition to the broad exposure related to public health research in a variety of fields that is provided through the PUBH 659 – Public Health Foundations course, students in the MS in Biostatistics receive extensive methodological training (Data Management & Reporting, Applied Linear Models, and Categorical Data Analysis are all required courses). Most also take elective courses in survival analysis (BIOS 622), clinical trials (BIOS 663), and/or meta-analysis (BIOS 663). All MS in Biostatistics students complete a research-based final project through their Biostatistics Practicum course (BIOS 628), with many opting for additional research training through the program's thesis option and the associated requirement for a faculty-supervised research course (BIOS 697 – Research).

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

As part of the required practicum course and in preparation for either the thesis or non-thesis option, students work in a practical setting for a minimum of 180 hours, applying principles and skills learned in classes to address research questions that arise in that setting. Students can use these practical and research experiences are the basis for either their thesis or final project.

6) 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 school.

Policies and procedures related to the MS in Biostatistics can be found at:

https://publichealth.hsc.wvu.edu/students/student-resources/student-handbooks/mph-and-ms-student-handbooks/

7) 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 section D17 of the ERF.

8) Briefly explain how the school ensures that the instruction and assessment in basic public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.

The foundational learning objectives are accomplished through the School's 3 credit-hour PUBH 659 – Foundations of Public Health course, required of all graduate students not enrolled in the MPH program.

9) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

Please see section D17 of the ERF.

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

Strengths: The MS in Biostatistics include the deep and expansive methodological training. Students are prepared for jobs in industry or to pursue more advanced training (or both). The BIOS faculty offer a breadth of professional experiences and expertise. Due to their extensive connections and funded projects within the Health Sciences Center, the University, and beyond, MS in BIOS students are able to connect with professionals and work on applied projects in a manner that afford them excellent experiential and applied education. The School of Public Health's collaboration with other health professions schools in the academic medical center and its affiliated institutes (e.g. the Rockefeller Neurosciences Institute and the Betty Puskar Cancer Institute), as well as collaborative opportunities with WVU Medicine and its flagship hospital (part of the same health sciences campus) and a regional National Institute for Occupational Safety and Health (NIOSH) office (also the same campus) provide exceptional practical educational experiences and research opportunities to the faculty and students.

Weaknesses: The program has not identified any weaknesses pertaining to this criterion.

Plans: Improvement plans include more robust and intentional industry involvement in program refinements and/or curriculum enhancements that may be identified moving forward.

D18. Academic Public Health Doctoral Degrees

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 in the context of a population health framework.

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 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.

The School of Public Health offers PhD degrees in Public Health Sciences with three concentrations: Epidemiology (EPID), Occupational and Environmental Health Sciences (OEHS), and Social and Behavioral Health Sciences (SBHS). Students can enroll into the program as "Regular standing" (students with bachelor's degrees or non-relevant master's degrees) or "Advanced standing" (students with MPH or strongly related master's degrees). Under normal circumstances program completion is expected to take around 4 years for full-time regular standing students, or around 2 years of course work and about 2 years of independent research, and about 3 years for full-time advanced standing students, or around 1 year of course work and about 2 years of independent research. The first year of coursework for regular standing students consists mostly of 600-level courses, many of which are also offered at the master's level, with the second year mostly devoted to 700-level courses that are exclusively offered to doctoral level students. Table 1 below includes a breakdown of credit completion requirements for graduation for regular and advanced standing students by the three program concentrations.

Table D18-A: Credit requirements for Regular vs. Advanced standing within the three program concentrations		
	Credit completion requirement	
	Regular Standing	Advanced Standing
Epidemiology	80	58
Occupational and Environmental Health Sciences	83	54
Social and Behavioral Health Sciences	82	54

Incoming advanced standing students are subject to an assessment conducted by the respective Department Chair, the Departmental PhD Advisor, and the Director of the PhD Program, to evaluate which courses can be waived from the PhD Core within each department. Normally, this should result in 25-30 credits being waived for an advanced standing student although that may vary between individuals based on prior coursework, recency, and experience.

Table 2 below includes a breakdown of all core courses (i.e., non-electives) for full-time regular standing students within the three program concentrations and overlap in course requirements across the three departments.

Table D18-B: Core courses within each PhD program concentration				
Course #	Abbreviated course title	Dept. requirement and overlap		
		EPID	OEHS	SBHS
PUBH 610	Public Health Practice	x	x	
PUBH 611	Epidemiology	x	x	x
PUBH 612	Biostatistics	x	x	
BIOS 611	Data Management	x		
EPID 611	Epidemiology	x		
PUBH 621	Public Health Prevention	x	x	
PUBH 620	Capacity	x	x	
EPID 612	Applied Epidemiology	x		
BIOS 604	Applied Biostatistics	x		x
EPID 675	GIS	x		
EPID/OEHS/SBHS 796	Graduate Seminar	x	x	x
BIOS 603	Applied Biostatistics 2	x	x	x
EPID/OEHS/SBHS 790	Teaching Practicum	x	x	x
EPID 711	Epidemiology	x		
EPID 712	Advanced Epidemiology	x		
OEHS 610	Environmental Practice		x	
OEHS 620	Occupational and Envir Hazard Assess		x	
OEHS 622	Public Health Toxicology		x	
OEHS 623	Occupational Injury Prevention		x	
BMS 700	Scientific Integrity	x	x	x
BMS 720	Scientific Writing	x	x	x

SBHS 601	Social and Behavioral Theory			x
SBHS 610	Public Health Research Methods			x
SBHS 611	Community Assessment			x
SBHS 613	Public Health Program Evaluation			x
SBHS 701	Public Health Grant Writing			x
SBHS 711	Research Translation for Health			x
SBHS 715	Intervention design			x
SBHS 760	Survey Research Methods			x
SBHS 761	Qualitative Methods			x
SBHS 763	Advanced Evaluation in Public Health			x
BIOS 601	Applied Biostatistics 1			x
BIOS 602	Applied Biostatistics lab			x
C&I 789	Teaching in Higher Education			x
PUBH 659	Public Health Foundations	x		x

*Blue indicates courses that are doctoral level only.

In addition to the core courses outlined above, students are required to complete between 9 and 15 elective course credits depending on concentration and regular vs. advanced standing enrollment.

2) Provide a matrix, in the format of Template D18-1, that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

Table D18-1.1: Foundational Public Health Learning Objectives Coverage for the Academic Public Health Doctoral Degree – Epidemiology		
Content	Course number(s) and name(s)	Describe specific assessment opportunity
1. Explain public health history, philosophy and values	PUBH 610: Contemporary Foundations of Public Health Practice	Reaction Paper (PUBH 610).
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 610: Contemporary Foundations of Public Health Practice	Reaction Paper (PUBH 610).
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 612: Research Translation and Evaluation in PH Practice, EPID 612: Applied Epidemiology, BIOS 603: Applied Biostatistics II, BIOS 604: Applied Biostatistics III, EPID 711: Quantitative Methods in Epidemiology, EPID 712: Quantitative Methods in Epidemiology, BMS 700: Scientific Integrity	Assignments 1-9, 2 exams, 7 quizzes (PUBH 612). 3 exams, 5 quizzes (EPID 612). Take-home problems, 2 exams (BIOS 603). 5 journal discussions, core project (BIOS 604). 4 data exercises (EPID 711). Weekly small assignments, core paper, paper presentation (EPID 712). Attendance (BMS 700).
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 611: Applied Epidemiology	Reaction Paper (PUBH 610). Quizzes, assignments, final exam (PUBH 611).
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 621: Public Health Prevention and Intervention	Reaction Paper (PUBH 610). 4 assignments, project presentation, article critiques, class participation (PUBH 621).
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 612: Research Translation and Evaluation in PH Practice, BIOS 611: Data Management and Reporting, BMS 700: Scientific Integrity	Reaction Paper (PUBH 610), Assignments 1-9, 2 exams, 7 quizzes (PUBH 612). Weekly home-assignments (BOIS 611). Attendance (BMS 700).
7. Explain effects of environmental factors on a population's health	PUBH 611: Applied Epidemiology, PUBH 621: Public Health Prevention and Intervention	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621).

8. Explain biological and genetic factors that affect a population's health	PUBH 611: Applied Epidemiology	Quizzes, assignments, final exam (PUBH 611).
9. Explain behavioral and psychological factors that affect a population's health	PUBH 611: Applied Epidemiology, PUBH 621: Public Health Prevention and Intervention	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621).
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 620: Building and Sustaining Public Health Capacity, PUBH 621 Public Health Prevention and Intervention, PUBH 620: Building and Sustaining Public Health Capacity	Reaction Paper (PUBH 610), 4 assignments, project presentation, article critiques, class participation (PUBH 621). class participation, 2 written exams, essay, oral presentation, homework assignments (PUBH 620).
11. Explain how globalization affects global burdens of disease	PUBH 611: Applied Epidemiology	Quizzes, assignments, final exam (PUBH 611).
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	PUBH 611: Applied Epidemiology, PUBH 621 Public Health Prevention and Intervention	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621).

Table D18-1.2: Foundational Public Health Learning Objectives Coverage for the Academic Public Health Doctoral Degree – Occupational and Environmental Health Sciences		
Content	Course number(s) and name(s)	Describe specific assessment opportunity
1. Explain public health history, philosophy and values	PUBH 610: Contemporary Foundations of Public Health Practice, OEHS 622: Public Health Toxicology	Reaction Paper (PUBH 610). 4 exams, presentation (OEHS 622).
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 610: Contemporary Foundations of Public Health Practice	Reaction Paper (PUBH 610)
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 612: Research Translation and Evaluation in PH Practice, BIOS 603: Applied Biostatistics II, BMS 700: Scientific Integrity	Assignments 1-9, 2 exams, 7 quizzes (PUBH 612). Take-home problems, 2 exams (BIOS 603). Attendance (BMS 700).
4. List major causes and trends of morbidity and mortality in the US or other community	PUBH 610: Contemporary Foundations of Public Health Practice, OEHS 623: Occupational Injury Prevention	Reaction Paper (PUBH 610). 5 team exercises, 5 commentaries, 2 examinations, final project and presentation (OEHS 623).

relevant to the school or program		
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 621: Public Health Prevention and Intervention	Reaction Paper (PUBH 610). 4 assignments, project presentation, article critiques, class participation (PUBH 621).
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 612: Research Translation and Evaluation in PH Practice, OEHS 620: Occupational and Environmental Hazard Assessment, BMS 700: Scientific Integrity	Reaction Paper (PUBH 610), Assignments 1-9, 2 exams, 7 quizzes (PUBH 612). 3 in-class exams, final exam, short exercises (OEHS 620). Attendance (BMS 700).
7. Explain effects of environmental factors on a population's health	PUBH 611: Applied Epidemiology, PUBH 621: Public Health Prevention and Intervention, OEHS 610: Environmental Practice, OEHS 623: Occupational Injury Prevention	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621). Quizzes, one test, presentation (OEHS 610). 5 team exercises, 5 commentaries, 2 examinations, final project and presentation (OEHS 623).
8. Explain biological and genetic factors that affect a population's health	PUBH 611: Applied Epidemiology, OEHS 622: Public Health Toxicology	Quizzes, assignments, final exam (PUBH 611). 4 exams, presentation (OEHS 622).
9. Explain behavioral and psychological factors that affect a population's health	PUBH 611: Applied Epidemiology, PUBH 621: Public Health Prevention and Intervention, OEHS 610: Environmental Practice, OEHS 623: Occupational Injury Prevention	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621). Quizzes, one test, presentation (OEHS 610). 5 team exercises, 5 commentaries, 2 examinations, final project and presentation (OEHS 623).
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 610: Contemporary Foundations of Public Health Practice, PUBH 620: Building and Sustaining Public Health Capacity, PUBH 621 Public Health Prevention and Intervention.	Reaction Paper (PUBH 610), 4 assignments, project presentation, article critiques, class participation (PUBH 621). class participation, 2 written exams, essay, oral presentation, homework assignments (PUBH 620).
11. Explain how globalization affects global burdens of disease	PUBH 611: Applied Epidemiology	Quizzes, assignments, final exam (PUBH 611).
12. Explain an ecological perspective on the connections among human health,	PUBH 611: Applied Epidemiology, PUBH 621 Public Health Prevention and Intervention, OEHS 610:	Quizzes, assignments, final exam (PUBH 611). 4 assignments, project presentation, article critiques, class participation (PUBH 621). Quizzes,

animal health and ecosystem health (e.g., One Health)	Environmental Practice, OEHS 620: Occupational and Environmental Hazard Assessment, OEHS 622: Public Health Toxicology	one test, presentation (OEHS 610). 3 in-class exams, final exam, short exercises (OEHS 620). 4 exams, presentation (OEHS 622).

Table D18-1.3: Foundational Public Health Learning Objectives Coverage for the Academic Public Health Doctoral Degree – Social and Behavioral Sciences		
Content	Course number(s) and name(s)	Describe specific assessment opportunity
1. Explain public health history, philosophy and values	SBHS 601: Social and Behavioral Theory, SBHS 611: Community Assessment, SBHS 711: Research Translation for Health, SBHS 715: Intervention Design, SBHS 760: Survey Research Methods	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611). 3 article summaries, 2 topic syntheses, participation (SHBS 711). 4 assignments, 2 presentations, final project (SBHS 715). 10 discussion postings, 10 mini-quizzes, individual main project, 2 exams (SBHS 760).
2. Identify the core functions of public health and the 10 Essential Services*	SBHS 601: Social and Behavioral Theory SBHS 611: Community Assessment, SBHS 613: Program Evaluation in Public Health, SBHS 711: Research Translation for Health, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611). Class participation, evaluation plan, client presentation (SBHS 613). 4 assignments, 2 presentations, final project (SBHS 715).
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	BIOS 601: Applied Biostatistics I, BIOS 602: Applied Biostatistics lab, BIOS 603: Applied Biostatistics II, BIOS 604: Applied Biostatistics III, BMS 700: Scientific Integrity, SBHS 610: Public Health Research Methods, SBHS 611: Community Assessment SBHS 613: Program Evaluation in Public Health, SBHS 701: Public Health Grant Writing, SBHS 711: Research Translation for Health, SBHS 715: Intervention Design, SBHS 760: Survey Research Methods, SBHS 761: Qualitative Methods	Homework assignments, 2 exams (BIOS 601). 10 lab assignments (BOIS 602). Take-home problems, 2 exams (BIOS 603). 5 journal discussions, core project (BIOS 604). Attendance (BMS 700). 8 short quizzes, journal critique, homework assignments, final project (SBHS 610). Article discussion lead, individual main project, final exam (SBHS 611). Class participation, evaluation plan, client presentation (SBHS 613). proposal, presentation (SBHS 701). 3 article summaries, 2 topic syntheses, participation (SHBS 711). 4 assignments, 2 presentations, final project (SBHS 715). 4 assignments, 2 presentations, final project (SBHS 715). 10 discussion postings, 10 mini-quizzes, individual main project, 2 exams (SBHS 760).

		reflection paper, grocery store visit, article critique, lens paper, project presentation, final paper, participation (SBHS 761).
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	SBHS 610: Public Health Research Methods, SBHS 611: Community Assessment, SBHS 613: Program Evaluation in Public Health	8 short quizzes, journal critique, homework assignments, final project (SBHS 610). Article discussion lead, individual main project, final exam (SBHS 611). Class participation, evaluation plan, client presentation (SBHS 613).
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	SBHS 601: Social and Behavioral Theory, SBHS 610: Public Health Research Methods, SBHS 613: Program Evaluation in Public Health, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). 8 short quizzes, journal critique, homework assignments, final project (SBHS 610).Class participation, evaluation plan, client presentation (SBHS 613). 4 assignments, 2 presentations, final project (SBHS 715).
6. Explain the critical importance of evidence in advancing public health knowledge	BMS 700: Scientific Integrity, SBHS 610: Public Health Research Methods, SBHS 611: Community Assessment, SBHS 613: Program Evaluation in Public Health, SBHS 701: Public Health Grant Writing, SBHS 711: Research Translation for Health, SBHS 715: Intervention Design, SBHS 760: Survey Research Methods, SBHS 761: Qualitative Methods	Attendance (BMS 700). 8 short quizzes, journal critique, homework assignments, final project (SBHS 610).Article discussion lead, individual main project, final exam (SBHS 611). Class participation, evaluation plan, client presentation (SBHS 613). proposal, presentation (SBHS 701). 3 article summaries, 2 topic syntheses, participation (SHBS 711). 4 assignments, 2 presentations, final project (SBHS 715). 10 discussion postings, 10 mini-quizzes, individual main project, 2 exams (SBHS 760). reflection paper, grocery store visit, article critique, lens paper, project presentation, final paper, participation (SBHS 761).
7. Explain effects of environmental factors on a population's health	SBHS 601: Social and Behavioral Theory, SBHS 611: Community Assessment, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611). 4 assignments, 2 presentations, final project (SBHS 715).
8. Explain biological and genetic factors that affect a population's health	SBHS 601: Social and Behavioral Theory, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). 4 assignments, 2 presentations, final project (SBHS 715).
9. Explain behavioral and psychological factors that affect a population's health	SBHS 601: Social and Behavioral Theory, SBHS 611: Community Assessment, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611). 4

		assignments, 2 presentations, final project (SBHS 715).
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	SBHS 601: Social and Behavioral Theory, SBHS 711: Research Translation for Health, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). 3 article summaries, 2 topic syntheses, participation (SHBS 711). 4 assignments, 2 presentations, final project (SBHS 715).
11. Explain how globalization affects global burdens of disease	SBHS 601: Social and Behavioral Theory, SBHS 611: Community Assessment	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611).
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	SBHS 601: Social and Behavioral Theory, SBHS 611: Community Assessment, SBHS 715: Intervention Design	2 quizzes, main project, weekly topics (SBHS 601). Article discussion lead, individual main project, final exam (SBHS 611). 4 assignments, 2 presentations, final project (SBHS 715).

3) Provide a matrix, in the format of Template D18-2, that lists competencies for each relevant degree and concentration. The matrix indicates at least one assessment activity for each of the listed competencies. 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.

Table D18-2.1: Foundational Competencies for the PhD program – all concentrations		
PhD Program competencies	Courses	Assessment
1. Develop effective strategies for teaching in higher education;	PUBH 790	Teaching Practicum. Attendance
2. Review and synthesize pertinent literature and formulate focused research questions that address identified knowledge gaps;	PUBH 610	Reaction papers, advanced orientation meetings, portfolio, reflection presentation
3. Design and conduct original research that uniquely contributes to the public health scientific knowledge;	PUBH 611	Quizzes, exams, PPT presentation
4. Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other public health community audiences.	EPID/OEHS/SBHS 796	Dissertation Research. All students are required to submit a 1st author publication before dissertation defense

Table D18-2.2: Competencies for the PhD program – Epidemiology		
Major additional competencies: Epidemiology	Course	Assessments
1. Design investigations of acute and chronic conditions, as well as other adverse health outcomes in targeted populations;	EPID 712	Core paper and presentation
2. Analyze and evaluate data from epidemiologic investigations, and disease and injury surveillance systems;	EPID 711	Data exercises
3. Evaluate health behaviors and outcomes in populations by such variables as age, sex, race/ethnicity, socioeconomic status, and disability;	PUBH 611	Quizzes, assignments, final exam
4. Critically evaluate results of epidemiologic studies, including study design, analysis results, and conclusions;	EPID 711, EPID 712	Data exercises, Core paper and presentation
5. Prepare written and oral reports and presentations to effectively communicate to professional audiences, policymakers, and the general public;	EPID 712	Core paper and presentation
6. Prepare research proposals for extramural peer-reviewed funding;	BMS 720	Scientific writing
7. Promote and model ethical conduct in epidemiologic practice;	BMS 700	Attendance
8. Bring epidemiologic perspectives to the development and analysis of public health policies.	PUBH 612	Short assignments, 2 exams

Table D18-2.3: Competencies for the PhD program – Occupational and Environmental Health Sciences		
Major additional competencies. Occupational and Environmental Health Sciences	Course	Assessments
1. Analyze issues and problems in occupational and environmental health and safety using critical evaluation, applied research methodology, and statistical methods;	OEHS 622, OEHS 623	4 exams, presentation (OEHS 622), 5 team exercises, 5 commentaries
2. Characterize the human health effects of major environmental and occupational hazards, both acute and chronic, including: air pollution, contamination of drinking water, and physical hazards;	OEHS 610, OEHS 620	Quizzes, one test, presentation (OEHS 610), 3 in class exams, final exam, short exercises (OEHS 620)
3. Analyze sources, pathways, and routes of exposure to environmental and occupational hazards, identify populations at high risk of exposure, and communicate that risk effectively;	OEHS 610, OEHS 620	Quizzes, one test, presentation (OEHS 610), 3 in class exams, final exam, short exercises (OEHS 620)
4. Create programs that protect the environment using proven technologies and novel approaches.	PUBH 621	4 assignments, project presentation, article critiques, class participation (PUBH 621),

Table D18-2.4: Competencies for the PhD program – Social and Behavioral Sciences		
Major additional competencies: Social and Behavioral Health Sciences	Course	Assessments
1. Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies;	SBHS 601	theory guided intervention project
2. Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences;	SBHS 610, BIOS 601-603	8 short quizzes, journal critique, homework assignments, final project (SBHS 610), homework assignments and problems (BIOS 601/602/603)
3. Review and synthesize pertinent behavioral literature and formulate focused specific aims and research questions that address identified knowledge gaps;	SBHS 611	article discussion lead, needs assessment plan (individual project)
4. Design and conduct original research that uniquely contributes to social and behavioral science knowledge base;	SBHS 760	Survey design project
5. Disseminate research findings through appropriate peer-reviewed publications and presentations and to other appropriate public health community audiences.	SBHS 711, SBHS 760	Article summaries, topic synthesis (SBHS 711), Survey design project (SBHS 760)

4) 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.

Students enrolled in the PhD Program in Public Health Sciences are trained in the theory and application of research methods aligned with their program concentration; Epidemiology, Occupational and Environmental Health Sciences, and Social and Behavioral Health Sciences. Each concentration requires students to complete a set of methods-based courses and both OEHS and SBHS also include research rotations as part of the PhD training. A brief description within each concentration follows:

Epidemiology

Different from Occupational and Environmental Health Sciences, and Social and Behavioral Health Sciences, Epidemiology is a methods-based subject. The dominant part of the PhD Curriculum in Epidemiology is therefore attributed to a range of issues that can be broadly described as training in research methodology including study design, statistical analyses, and data handling. Courses include among others PUBH 611: Epidemiology for Public Health Practice which is an overview course of epidemiological methods, BIOS 603: Applied Biostatistics II, which addresses estimation and hypothesis testing within the context of the general linear model, and EPID 712: Quantitative Methods

in Epidemiology which covers a variety of applied quantitative methods, detection of confounding, and interpretation of research findings.

Occupational and Environmental Health Sciences

The Occupational and Environmental Health Sciences concentration in the Public Health Sciences PhD program is for scientist-practitioners and emphasizes the understanding of the toxic effect of exposures in the environment, the environmental hazards associated with injuries and the monitoring and evaluation methods that are important for quantifying the potential risk of those events. Methods-based training includes courses such as: PUBH 611: Epidemiology for Public Health Practice which is an overview course of epidemiological methods, PUBH 612: Research Translation and Evaluation in Public Health Practice, which introduces quantitative and qualitative methods as applied to public health practice as well as methods for evaluating public health programs and policies, and BIOS 603: Applied Biostatistics II, which addresses estimation and hypothesis testing within the context of the general linear model.

Social and Behavioral Health Sciences

The Department of Social and Behavioral Health Sciences has been described as the “intervention arm” of the School of Public Health. In the PhD program students learn about the theory, design, application and evaluation of micro, mezzo and macro-type interventions. Methods-based courses include for example SBHS 610: Public Health Research Methods which is an overview course of social and behavioral methods, SBHS 611: Community Assessment which is designed to provide students with the knowledge and skills needed to conduct meaningful community needs assessments to improve a community’s health, and SBHS 760: Survey Research Methods, which provides students with an overview, knowledge and skills to design and conduct survey research.

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

Once students have completed all of the required coursework, they must pass a qualifying examination in order to continue in the program. The qualifying exam is based on core public health and discipline-specific material and is administered within the student’s home department. Successful passage of the qualifying examination signifies competence in public health sciences and the student’s major field of study and indicates a readiness to engage in independent research. The qualifying examination is given by the student’s dissertation committee in the OEHS & SBHS departments and by an exam committee in the EPID department and consist of two components: a written exam and an oral defense of the written exam. Students can only sign up for dissertation credits after passing both the written and oral components of the qualifying exam which is usually conducted at the end of the 4th semester for regular standing students and by the end of the 2nd semester for advanced standing students.

Once a student officially passes the qualifying exam he/she is expected to devote all their time to working on a dissertation proposal, which culminates in a Dissertation Proposal Defense. Usually drafting, revising and defending the proposal takes one full semester. The dissertation proposal defense serves as the candidacy exam. In a private session that includes the complete dissertation committee, the student will defend the proposal. Upon successful defense of the proposal, which is graded as pass or fail, he/she will be admitted to candidacy.

The student's research will be compiled into a written dissertation. Two dissertation formats are permitted; a traditional 5-6-chapter book format or a Journal Article Format (JAF), which consists of a series of three publishable manuscripts based on the student's dissertation research. The PhD program emphasizes peer-reviewed research publications as the dissertation product because of their positive impact on students' skills and their post-graduation success. The decision of which format to use is made by the student in close consultation with the dissertation committee chair.

Prior to dissertation defense each student is required to have a minimum of one first-author publication based on the dissertation research either under review (OEHS) or accepted to be published (EPID & SBHS) in a peer-review journal. The dissertation will be defended in a public forum that includes all dissertation committee members, who must sign the dissertation approval form for the dissertation to be completed. The defense must be announced to the entire Health Sciences Center, and students are required to ensure that fliers are posted around the HSC campus that announce the details of the public defense. Once the dissertation committee agrees the student is ready to defend and they have met the first-author publication requirement, the student will take the following steps to set up and conduct their defense:

1. Three weeks prior to the defense, the student must provide the final reading copy of the dissertation to all members of the dissertation committee.
2. Two weeks prior to defense, a Shuttle Sheet Request form must be handed into the Office of Student Services signed by all dissertation committee members, which signals the students status as ready for defense.
3. One week prior to defense the student must announce the details of the defense to the University.

In order to pass the dissertation defense only one unfavorable vote among members of the dissertation committee is permitted. If the committee determines the student has passed the defense, all members will sign a Shuttle Sheet, which documents the successful defense of the dissertation. The student should also sign the form and bring it to the SPH Office of Student Services for processing.

If the committee determines that the student has not passed the defense, he/she will be given detailed instructions as to what revisions and further steps are needed and a deadline by which revisions must be received for further review by the committee chair. These details will be given to the student in writing no later than 10 calendar days from the date of the original dissertation defense. Students may not apply for graduation until the defense has been passed.

Once the defense has been passed, the written dissertation must be submitted in accordance with the WVU policy regulating electronic submission of theses and dissertations.

6) 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 school.

The PhD Program Student Handbook: https://publichealth.hsc.wvu.edu/students/student-resources/student-handbooks/phd-student-handbooks/

School of Public Health PhD Program catalogue: http://catalog.wvu.edu/graduate/publichealth/#Doctoral

PhD Programs within the three Departmental concentrations:

https://publichealth.hsc.wvu.edu/students/graduate-programs/phd-in-public-health-sciences/

Policies and Forms: https://publichealth.hsc.wvu.edu/students/student-resources/policies-forms/

7) 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 section D18 of the ERF to view six dissertation examples produced in the last three years.

8) 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 courses that introduce the history and basic concepts of public health. In EPID and SBHS all students are required to take PUBH 659, Public Health Foundations which examines the history of public health, from its roots in sanitation to current efforts to broadly improve population health. Each of the five core disciplines, epidemiology, biostatistics, environmental health, social and behavioral sciences, and health policy and management receives attention. Quantitative and qualitative research designs are covered as well as infectious diseases, tuberculosis, and risk management. In OEHS all students are required to take PUBH 610, Contemporary Foundations of Public Health Practice, which examines the goals and mission of public health, from its historical roots in sanitation to current efforts to improve population health. Each of the five core disciplines – biostatistics, epidemiology, health policy and management, occupational and environmental health, and social and behavioral sciences are introduced, as are their relationships to each other. The interdisciplinary nature of the field is emphasized.

For most students with advanced standing status at program entry (MPH or strongly relevant master's degrees) this usually means that they already have generated the foundational knowledge so introductory courses are not required. However, if the foundational knowledge is deemed lacking via review of prior course work and/or training, they will be required to pass a foundational course.

9) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

Please see section D18 of the ERF to view course syllabi.

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

Strengths: The School has recruited and retained an outstanding faculty with demonstrable achievements in the areas of research and practice scholarship that translates well to student instruction.

Weaknesses: none noted

Plans: During the last 18 months, an ad-hoc committee within the SPH has been working on a revision of the PhD Program in Public Health Sciences under the leadership of the current PhD Program Director. The main reasons for this proposed revision is that for several years the program has been directed largely from the departmental level which has essentially led to three only loosely related programs being offered, from the three departments; EPID, OEHS, and SBHS.

The implication of this structure has been that the current program does not have a common core or many overlapping elements, and with roughly 25-30 PhD students enrolled in the program at any given time, it is lacking a cohort "feel" for the students. This structure has also led to a large number of courses that are poorly attended. Further, given the recent changes to the CEPH MPH competencies, the current PhD program has largely ceased to function as an extension of the current MPH program in the School of Public Health. The revised program as proposed will retain the common elements of the current program, with some notable changes. The proposed program structure is as follows:

- It provides a common core public health foundational training program shared among all PhD students from our family of majors;
- Foundational coursework is complemented by major-specific coursework. A sequence of coursework consisting of 15 credits is proposed for each major (EPID, OEHS, SBHS);
- In addition to the interdisciplinary foundational and major coursework, a structure is also proposed that permits students to further customize their training in their major. Twelve credit hours are proposed as electives;
- Elements that currently "work" in the existing PhD curricula are retained, that is, graduate seminar and research rotations. Two seminars and two research rotations are proposed;
- The combined proposal allows sufficient exposure to public health breadth, PhD major depth, and integration across disciplines. Lastly, two 1-credit teaching practicum hours are proposed;

Most of the revised program includes elements that are already on the books. Two new courses will need to be developed, one in EPID and one in OEHS, in addition to two single credit seminars in OEHS. All other elements (courses, seminars, teaching practicum and dissertation work schedule) are retained from the previous program. Hence, WVU views this as a program revision and not a new program. Presently the program structure for full-time regular standing students is as follows:

Foundational Interdisciplinary Coursework		**21**
PUBH 610	Contemporary Foundations of Public Health Practice	2
PUBH 611	Applied Epidemiology	2
PUBH 612	Research Translation & Evaluation for Public Health Practice	4
SBHS 701	Public Health Grant Writing	3
BMS 700	Scientific Integrity	1
BIOS 603	Applied Biostatistics 2	3
PUBH 796	Graduate Seminar (Taken two times for 1 credit each)	2
PUBH 797	Research (Two 1-hour research rotations)	2
PUBH 790	Teaching Practicum (Two 1-hour experiences) *	2
Major Coursework		**15**
Epidemiology		
EPID 711	Methodological Issues in Design & Analysis of Cohort Studies	3
EPID 712	Quantitative Methods in Epidemiology	3
EPID 663	Public Health Surveillance	3
EPID 789	Contemporary Issues in Epidemiology (new seminar title)	3 (1x3)
EPID XYZ	Advanced EPID Elective (PR: EPID 711 &712) (course to be developed)	3
Occupational and Environmental Health Sciences		
OEHS 620	Occupational and Environmental Hazard Assessment	4
OEHS 796	Graduate seminar	2
OEHS 734	Aerosols and Health	3
OEHS 622	Public Health Toxicology	3
OEHS XYZ	Advanced Topics in Toxicology (course to be developed)	3
Social and Behavioral Sciences		
SBHS 715	Intervention Design	3
SBHS 761	Qualitative Research Methods (even years)	3
SBHS 763	Advanced Evaluation of Public Health (odd years)	3
SBHS 760	Survey Research Methods	3
BIOS 604	Applied Biostatistics 3	3
Electives		**12**
Dissertation Research (Does not include research rotation hours)		**27**
Qualifying Examination		
Dissertation Proposal		
Dissertation Defense		
Total Hours		**75**

D19. All Remaining Degrees

Students enrolled in any of the SPH's degree programs that are not addressed in Criteria D2, D3, D9, D17 or D18 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.

Graduate

Beginning in Fall 2020, the School of Public Health will begin offering a new Master of Health Administration (MHA) degree, a substantive but strategically important change for the School of Public Health. This two-year (full-time), residential program consists of 46-48 credit hours (depending on selected electives) and was developed with the intention of seeking program-level accreditation buy the Commission on Accreditation of Healthcare Management Education (CAHME). The program was approved by the university during the Fall 2019 (November 8, 2019) for launch the following academic year. While all MHA students will take the core Foundations of Public Health course offered by the School of Public Health – ensuring instruction in and assessment of the foundational public health learning objectives. Additionally, while MHA students will have competencies, courses, and content specific to the discipline of health administration, a distinguishing feature of the new WVU MHA program will be the intentional integration of the MHA and MPH (particularly the Health Policy concentration) programs through several shared courses. This deep degree of interprofessional education is purposed to assure WVU MHA students have a deep grounding in the concepts and practices of public health.

The initial discussion of creating a Master of Health Administration degree within the School of Public Health (SPH) began in 2017. Leaders from WVU Medicine approached WVU Health Sciences Center and SPH leaders about the need for the degree to fill vital workforce development and leadership opportunities throughout the WVU Medicine system. SPH leaders also came to understand similar needs while discussing the potential program with other health systems and public health organizations throughout West Virginia. Planning for the program progressed as SPH leaders consulted with leaders from nationally-ranked, CAHME-accredited MHA programs. The SPH subsequently conducted a national search for an Associate Dean for Professional Programs (hired in Fall 2018), who was tasked with developing and launching the MHA program. As part of this process, the Associate Dean built an advisory council of local, regional, and national healthcare leaders who have helped inform the faculty on the selection of program competencies and proposed curriculum, as well as the program's mission, vision, and values.

The primary audience for this program will be working clinical and administrative professionals in healthcare, health services, and public health. Increasingly, these leaders require additional skills and credentials to advance in their professional careers. The proposed MHA program will provide the necessary training to meet that need. We also expect that some more traditional students will seek the MHA degree. The program's competencies (learning outcomes) and curriculum will readily prepare these students for more entry-level management and middle management opportunities within a variety of health administration settings.

MHA Curriculum & Full-Time Plan of Study

Fall 1		Credits
PUBH 659	Foundations of Public Health	3
HPML 623	Healthcare Finance	3
PUBH 640*	Leadership & Collaboration in Public Health*	3
HPML 682	Managing Quality Improvement in Healthcare	3
HPML 696*	Graduate Seminar: Part 1*	1
Spring 1		**Credits**
HPML 620*	Managing Robust Public Health Organizations*	3
HPML 610	Health Economics for Population Health	3
HPML 655	Health Services Project Management	3
HPML 656	Managerial Epidemiology & Strategy	3
HPML 696*	Graduate Seminar: Part 2*	1
Summer 1		**Credits**
HPML 626	Internship	3
Fall 2		**Credits**
HPML 622	Analytic Methods for HPML	3
HPML 650	Prof. Issues in Health Administration: Health Policy	1
HPML 652	Prof. Issues in Health Administration: Law & Ethics	1
---	Elective	2-3
HPML 696*	Graduate Seminar: Part 3*	1
Spring 2		**Credits**
HPML 659	Integrative Capstone in Health Administration	3
HPML 653	Prof. Issues in Health Administration: Talent & Culture	1
HPML 654	Prof. Issues in Health Admin.: Health Info. & Mgmt. Systems	1
---	Elective	2-3
HPML 696*	Graduate Seminar: Part 4*	1
	TOTAL	**46-48**

Type	# of Courses	# Credits
Use/Revise* Existing	14	35
New**	7	13

**These current courses will be retitled and/or have other minor revisions to better reflect their focus on health administration.*
*** Professional Seminar and Internship courses will be adapted from existing Public Health (PUBH) labeled courses. Professional Issues courses will be offered as courses with multiple, topic-focused modules.*

PUBH 640 will be retitled “Health Systems Leadership”
HPML 620 will be retitled “Health Administration & Operations”
HPML 696 will be retitled “Professional Seminar”

Syllabi for current courses are included in the Electronic Resource File. Syllabi for new courses are being developed through the university's curricular approval process and will be finalized during the Spring 2020 semester.

The MHA programs focuses on 27 distinct competencies (learning outcomes in the university's vernacular) across 5 domains. These are detailed below. A matrix mapping competencies to specific courses in the curricular is attached in the Electronic Resource File.

MHA Competencies/Learning Outcomes

Communication and Relationship Management

1. Interpersonal Communication: Students will build collaborative and productive relationships.
2. Relationship Management: Students will demonstrate negotiation and conflict resolution skills.
3. Writing Skills: Students will prepare effective business communications.
4. Presentation Skills: Students will demonstrate professional oral communication and presentation skills.

Leadership Skills

5. Leading & Managing Others: Students will hold self and others accountable for team and/or organizational goal attainment.
6. Change Management: Students will show the ability to promote and manage change.
7. Honest Self-Assessment: Students will exhibit self-awareness through active reflection and self-assessment.
8. Systems Thinking: Students can assess the potential impacts and consequences of decisions in a broad variety of situations.
9. Problem-Solving & Decision-Making: Students are able to apply evidence-based techniques to health services decisions.

Professionalism

10. Personal & Professional Ethics: Students will exhibit honesty, integrity, and ethical behavior.
11. Personal Responsibility: Students will fulfill their commitments and demonstrate accountability.
12. Professional & Community Contribution: Students demonstrate a commitment to community engagement and service.
13. Working in Teams: Students will demonstrate the capacity to work in and lead teams.

Knowledge of the Healthcare Environment

14. Health Services Issues & Trends: Students can examine important issues in health services, including circumstances causing major changes and reform in U.S. health systems and services
15. Health Services Legal Principles: Students are able to discuss and analyze health-related legal principles, including compliance standards, regulations, and risk management
16. Health Policy: Students are able to articulate the impact of health policies on the delivery of health services.
17. Public & Population Health: Students understand and explain the major factors in population health status.

Business and Analytical Skills

18. Financial Management: Students are able to compile, analyze, and interpret financial information.
19. Human Resources: Students will apply methods and techniques related to the management of health services organizations, employees and professional staff.
20. Organizational Dynamics & Governance: Students can articulate the roles, responsibilities, structures, and influence of governing bodies in health services organizations.
21. Strategic Planning: Students will formulate an evidence-based business strategy based on environmental analysis, development of strategic alternatives, and discernment of a competitive strategy.
22. Marketing: Students will analyze and assess markets, market segmentation, strategy, change, and innovation.
23. Information Management: Students will demonstrate proficient technology skills and understanding of information technology in health services environments.
24. Quality/Performance Improvement: Students will discern relevant problems and apply principles and concepts of quality/performance improvement.
25. Data Analytics: Students can analyze and interpret quantitative information.
26. Planning and Managing Projects: Students will design, plan, implement and assess projects, including developing appropriate timelines related to performance, structure and outcomes.
27. Health Economic Analysis and Application: Students will analyze and apply health economics theories and concepts to decision making.

Given the expansive nature of the professional health administration field, a strong initial and on-going enrollment is expected. Demand is strong nationwide among traditional students, working professionals, and clinicians seeking more senior leadership roles within healthcare. The best MHA programs nationally admit between 20-25 students annually. As outlined in below, the projected enrollment for the MHA program should reach 25 within the first four years (roughly 25% annual increase) and be maintained at that level thereafter, for a total annual enrollment of approximately 50 students. As necessitated by market factors, additional tracks (accelerated, executive, and/or dual-degree etc.) could be established once the program is accredited.

MHA program projected annual enrollment, Years 1-5

	Year 1	Year 2	Year 3	Year 4	Year 5
New	15	18	21	25	25
Returning	--	15	18	21	25
TOTAL	15	33	39	46	50

The MHA program will conduct an annual review of program outcomes. Important measures the program will track include: percent of students graduating on-time (2 years for full-time students; 6 years or earlier for part-time students); percent of graduates obtaining employment in the field within 90-days of graduation, percent of graduates obtaining administrative fellowships, and percent of graduates who are accepted into additional graduate or professional programs. To be sure the program is building the health administration workforce of West Virginia, the program will also annually track the percent of students matriculating into the program from West Virginia, as well as the percent of graduates who go on to field-related employment within the state.

The MHA program will seek accreditation from the Commission on Accreditation of Healthcare Management Education (CAHME). We expect the program to enter candidacy during the Fall 2020 semester; and we will submit for accreditation after the initial cohort of students graduates in Spring

2022. We further expect the CAHME site visit to follow during Fall 2022, with accreditation coming the following Spring (Spring 2023).

Undergraduate

The students in the Bachelor of Science in Health Services Management and Leadership (BS HSML) program will take the same set of public health foundational core courses as students in the BS in Public Health program, revised for Ay 2020-21 (see section D19, BS HSML folder, in the ERF to view detailed program requirements).

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 D19-1 that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

Graduate

Table D19-1.A: Content Coverage for All Remaining Degree Programs
Master of Health Administration

Content	Course number(s) and name(s)	Describe specific assessment opportunity[n]
1. Explain public health history, philosophy and values	PUBH 659: Foundations of Public Health	Module: Background: The Public Health Mission. Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of public health history, philosophy and values into research summary and summative class presentation is expected.
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 659: Foundations of Public Health	Module: Background: The Public Health Mission. Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of core functions and essential services into research summary and summative class presentation is expected.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 659: Foundations of Public Health	Multiple modules, especially Epidemiology (2) and Biostatistics (2). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Explanation of role of quantitative and qualitative methods is reflected in final exam essay questions and the students' summative class presentations.
4. List major causes and trends of morbidity and mortality in the US or other	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam

community relevant to the school or program		consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2) as well as modules on Epidemiology (2) and Molecular Diagnosis in Public Health (1). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 659: Foundations of Public Health	Students complete a research summary and annotated bibliography in which they outline a line of research of interest to them and discuss the proposed area of work in relation to the advancement of public health goals and practice. Students also summarize a minimum of 10 articles related to the research area. Finally, students provide a summative class presentation addressing their research area, outcomes from their practice-based experience with vulnerable communities, and a review of the key learning from across the course.
7. Explain effects of environmental factors on a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
8. Explain biological and genetic factors that affect a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3) and Molecular Diagnosis in Public Health (1). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
9. Explain behavioral and psychological factors that affect a population's health	PUBH 659: Foundations of Public Health	Multiple modules on Social and Behavioral Sciences (2). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 659: Foundations of Public Health	Multiple modules on Health Policy, Management and Leadership (2) and Social and Behavioral Sciences (2). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.
11. Explain how globalization affects global burdens of disease	PUBH 659: Foundations of Public Health	Multiple modules on Health Policy, Management and Leadership (1) and Social and Behavioral Sciences (2), and Occupational and Environmental Health Sciences (2). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each

		content area. Integration of content area expected in summative class presentation and research summary.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	PUBH 659: Foundations of Public Health	Multiple modules on Occupational and Environmental Health Sciences (3) and Molecular Diagnosis in Public Health (1). Weekly lecturer assessment (1-10 scale) of student comprehension and participation. Final exam consists of essay questions covering each content area. Integration of content area expected in summative class presentation and research summary.

Please note that the provided matrix is identical for the one provided in D17 (for the MS in Biostatistics). These programs use the same course, and thus the same assessments, to provide and assess the foundational public health learning outcomes.

Undergraduate

Table D19-1.B: Content Coverage for All Remaining Degree Programs Bachelor of Science in Health Services Management and Leadership		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity[n]**
1. Explain public health history, philosophy and values	PUBH 101	exam
2. Identify the core functions of public health and the 10 Essential Services*	PUBH 101	exam
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBH 222	exam
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBH 222	exam
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 101	exam
6. Explain the critical importance of evidence in advancing public health knowledge	PUBH 202	Social Determinants of Health Presentation that includes evidence-based information
7. Explain effects of environmental factors on a population's health	PUBH 243	exam
8. Explain biological and genetic factors that affect a population's health	PUBH 243	exam
9. Explain behavioral and psychological factors that affect a population's health	PUBH 101	exam
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	PUBH 202	Social Determinants of Health Model
11. Explain how globalization affects global burdens of disease	PUBH 201	Country-specific Global Public Health Project
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)	PUBH 201	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.

Graduate

The foundational learning objectives are accomplished through the school's 3 credit-hour PUBH 659 – Foundations of Public Health course, required of all graduate students not enrolled in the MPH program.

Undergraduate

All students in both School of Public Health undergraduate majors (1. Public Health and 2. Health Services Management and Leadership) take the same 22 credit hours of foundational core public health courses during their first two years in the programs.

Public Health Foundation Courses: 22 credit hours

PUBH 101	Introduction to Public and Community Health	3 cr
PUBH 200	Introduction to Public Health Careers and Information	1 cr
PUBH 201	Global Perspectives in Public Health	3 cr
PUBH 202	Social Determinants of Health	3 cr
PUBH 205	Writing for Public Health Audiences	3 cr
PUBH 233	US Healthcare System: Structures and Incentives (previously PUBH 460)	3 cr
PUBH 211	Biostatistics for Population Health	3 cr
PUBH 222	Epidemiology for Population Health	3 cr

3) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

Please see section D19 of the ERF to view the syllabus for both programs.

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

Graduate: Given that the MHA program will not launch until Fall 2020, we cannot provide an assessment of strengths or weaknesses at this time. We do believe the intentional integration of the MHA and MPH programs and the associated interdisciplinary/interprofessional learning will become a strength and a distinguishing factor of both programs. The MHA program will continue to monitor the effectiveness of the public health foundations courses (PUBH 659) related to the delivering and assessing the defined foundational public health learning objectives.

Undergraduate: n/a

D20. Distance Education

Not applicable

The Online MPH Program and Online MS in School Health Education Programs no longer admitted students in 2017. This Self-Study reporting coincides with the need to present current information. This serves as our notice of a substantive change. Due to the “teach out” of remaining students in the program we have not submitted a Substantive Change deleting the program.

See documentation provided in section D20 of the ERF.

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
Abildso, Christiaan	Associate Professor	Tenured	PhD, MPH,	West Virginia Univ	Kinesiology, Public Health	Social & Behavioral Sciences (MPH, PhD)
Allen, Lindsay	Assistant Professor	Tenure-track	PhD, MA	Emory Univ, Univ of Chicago	Health Services Research & Health Policy, Health Administration and Policy	Health Policy, Management and Leadership (MPH)
Andress, Lauri	Assistant Professor	Tenure-track	PhD, MPH, JD	Univ of Texas Health Science Center, South Texas College of Law	Management & Poly Sciences, Health Service Organization (Public Health), Law	Health Policy, Management and Leadership (MPH)
Bhandari, Ruchi	Assistant Professor	Tenure-track	PhD, MPA, MA, MBA	West Virginia Univ, Univ of Rajasthan (India)	Public Health Sciences, Public Administration (Healthcare), Economics, Business Administration	Epidemiology (BSPH, MPH)
Bias, Thomas	Associate Professor	Tenured	PhD, MA	West Virginia Univ	Political Science	Health Policy, Management and Leadership (MPH)
Castle, Nicholas	Professor	Tenured	Phd, MHA	Univ State College of Pennsylvania, Willkes Univ	Health Policy and Administration, Health Administration	Health Policy, Management and Leadership (MPH)

Clayton, Elizabeth	Assistant Professor	Non-tenure track	PhD, MPH, MS	West Virginia Univ, Yale	Social & Behavioral Health Sciences, Public Health, Chronic Disease Epidemiology	Social & Behavioral Sciences (BSPH, MPH)
Davidov, Danielle	Assistant Professor	Tenure-track	PhD	West Virginia Univ	Public Health Sciences	Social & Behavioral Sciences (MPH)
Davis, Stephen	Associate Professor	Tenure-track	PhD, MPA, MSW	West Virginia Univ	Social & Behavioral Health Sciences, Public Administration, Social Work	Health Policy, Management and Leadership (BSPH, MPH)
Dino, Geri	Professor	Tenured	PhD, MS	Kansas St Univ	Applied Cognitive Psychology, Developmental Psychology	Social & Behavioral Sciences (MPH, PhD)
Duval, Robert	Associate Professor	Tenured	PhD, MA	Florida St Univ	Political Science	Health Policy, Management and Leadership (MPH)
Gao, Weimin	Professor	Tenured	PhD, MS, MPH	Univ of Pittsburgh, Chinese Academy of Preventive Medicine (China)	Environmental and Occupational Health, Biostatistics, Public Health	Occupational and Environmental Health Sciences (MPH, PhD)
Guo, Lan	Professor	Tenured	PhD	West Virginia Univ	Computer & Information Science	Occupational and Environmental Health Sciences (MPH)
Hand, Gregory	Professor	Tenured	PhD	Univ of Texas Southwestern Medical Center at Dallas	Physiology	Epidemiology (BSPH, MPH)
Hulsey, Thomas	Professor	Tenured	ScD	Johns Hopkins Univ	Maternal & Child Health	Epidemiology (MPH)
Hunt, Janet	Teaching Assistant Professor	Non-tenure track	MPH	Univ of Tennessee	Community Health Education	Social & Behavioral Sciences (BSPH, MPH)
Huzurbazar, Snehalata	Professor	Tenured	PhD	Colorado St Univ	Statistics	Biostatistics (MPH, MS)
Innes, Karen	Professor	Tenured	PhD	Cornell Univ	Biopsychology	Epidemiology (MPH, PhD)
Jelsema, Casey	Assistant Professor	Tenure-track	PhD	Western Michigan Univ	Statistics	Biostatistics (MPH, MS)

Kelley, George	Professor	Tenured	DA	Middle Tennessee St Univ	Exercise Science	Biostatistics (MPH, MS)
Knox, Sarah	Professor	Tenured	PhD	Univ of Stockholm	Experimental Psychology	Epidemiology (MPH, PhD)
Knuckles, Travis	Assistant Professor	Non-tenure track	PhD	NC State Univ	Comparative Biomedical Sciences	Occupational and Environmental Health Sciences (BSPH, MPH)
Kristjansson, Alfgeir	Associate Professor	Tenured	PhD	Karolinska Institute	Social Medicine	Social & Behavioral Sciences (MPH, PhD)
Lilly, Christa	Associate Professor	Tenured	PhD	Vanderbilt Univ	Psychology	Biostatistics (MPH, MS)
McCawley, Michael	Associate Professor	Non-tenure track	PhD	NY Univ	Environmental Health	OEHS (BSPH, MPH)
Misra, Ranjita	Professor	Tenured	PhD	Old Dominion Univ	Public Health	Social & Behavioral Sciences (MPH)
Morris, Toni	Teaching Assistant Professor	Non-tenure track	EdD	West Virginia Univ	Curriculum and Instruction	Social & Behavioral Sciences (BSPH, MPH)
Rudisill, Toni	Research Assistant Professor	Non-tenure track	PhD	West Virginia Univ	Epidemiology	Epidemiology (MPH)
Wen, Sijin	Associate Professor	Tenured	PhD	Univ of Texas	Biostatistics	Biostatistics (MPH, MS)
Zullig, Keith	Professor	Tenured	PhD	Univ of South Carolina	Health Promotion, Education, & Behavior	Social & Behavioral Sciences (MPH, PhD)

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.

Table 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
Alexander, Linda	Tenured	Professor / WVU	10%	EdD, Med	Univ of Virginia, James Madison Univ	Counselor Education	Social & Behavioral Sciences (MPH)
Allen, Anna	Non-tenure track	Associate Professor / WVU	10%	MD, MPH, MS	West Virginia Univ	Medicine, Public Health, Industrial Hygiene	Occupational and Environmental Health Sciences (MPH)
Baus, Adam	Non-tenure track	Research Assistant Professor / WVU	10%	PhD, MPH, MA	West Virginia Univ	Social & Behavioral Sciences, Public Health, Applied Social Research	Social & Behavioral Sciences (MPH)
Bossarte, Robert	Secondary Appointment, Tenured ?	Associate Professor / WVU	10%	PhD, MA	Univ of Notre Dame, Flordia International Univ	Sociology, Comparative Sociology	Epidemiology (BSPH, MPH)
Carlton, Erik	Associate Professor	Tenured	10%	DrPH, MS	Univ of Kentucky	Health Services Management, Family Studies	Health Policy, Management and Leadership (MPH, MHA)
Coben, Jeffrey	Tenured	Professor / WVU	10%	MD	Univ of Pittsburgh	Emergency Medicine	Health Policy, Management and Leadership (MPH)
Cottrell, Lesley	Tenured	Professor / WVU	10%	PhD, MA	West Virginia Univ, Marshall Univ	Developmental Psychology, Child Clinical Psychology	Social & Behavioral Sciences (MPH)

Giacobbi, Peter	Tenured	Associate Professor / WVU	10%	PhD, MS	Univ of Tennessee, Miami University	Education, Sports Behavior and Performance	Social & Behavioral Sciences (MPH)
Gross, Diane	Non-tenure track	Associate Professor / WVU	10%	PhD, DVM	Ohio St Univ	Veterinary Epidemiology, Veterinary Medicine	Epidemiology (MPH)
Hamrick, Audra	Non-tenure track	Teaching Assistant Professor / WVU	10%	MA	West Virginia Univ	Counseling	Social & Behavioral Sciences (BSPH, MPH)
Hendricks, Brian	Research Assistant/Professor	Non-tenure track	10%	PhD	West Virginia University	Epidemiology	Epidemiology (MPH)
Moran, Garrett	Professor	Professor / WVU	10%	PhD, MPH, MA	American Uinv, West Virginia University	Public Administration, Public Administration, Clinical Psychology	Health Policy, Management and Leadership (MPH)
Myers, Douglas	Associate Professor	Tenured	10%	ScD	Univ Massachusetts Lowell	Epidemiology	Occupational and Environmental Health Sciences (MPH, PhD)
Polini, Robin	Secondary Appointment, Associate Professor	Associate Professor / WVU	10%	PhD	Johns Hopkins	Epidemiology	Epidemiology (MPH)
Rauscher, Kimberly	Associate Professor	Tenured	10%	ScD	Univ Massachusetts Lowell	Work Environment	Occupational and Environmental Health Sciences (MPH, PhD)
Smith, Gordon	Professor	Tenured	10%	MB ChB	Univ of Otago (New Zealand), Harvard SPH	Medicine, Epidemiology	Epidemiology (MPH, PhD)
Tompkins, Nancy O'Hara	Non-tenure track	Research Assistant Professor / WVU	10%	PhD	Univ of Maryland	Health Education	Social & Behavioral Sciences (MPH)

Woodrum, Sarah	Assistant Professor	Non-tenure track	10%	DrPH	Univ of Illinois at Chicago	Leadership	Health Policy, Management and Leadership (MPH)

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

Please view section E1 of the ERF to view faculty CVs.

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

All faculty, regardless of rank, receive an annual evaluation. Their contributions are evaluated and their goals are developed with their department chair.

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

Strengths: We have an excellent complement of faculty to fulfill our teaching, research and service mission.

Weaknesses: None noted

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, including information on appointment tracks for practitioners, if applicable. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

SPH faculty interact with numerous organizations locally, throughout the state and region, and nationally/internationally. These interactions allow the faculty to integrate their perspectives of interacting with the practice community, as well as sharing the practice community's perspective on the delivery of public health and population health services. The interactions with the multiple practice communities allow SPH faculty a ready source of guest lecturers to enhance the classroom learning of students. Adjunct faculty also provide perspectives from public health practice.

MPH students, through a required graduate seminar, are introduced though public health practice experience by attending at least one Monongalia (MON) County Board of Health meetings, which are held quarterly. The County Health Department is walking distance from the SPH and by requiring student attendance early on in their curriculum, they are introduced to policy realities of public health and, depending on the unpredictable agenda, are witness to the exchange between public health practitioners, board of health members, and community members on topics ranging from the routine delivery of immunization services to the often heated debate surrounding smoking ordinances. The close proximity of the county health department provides a working laboratory for the SPH. As of this writing we have secured a formal MOU with the Mon County Health Department (see section E2 of the ERF)

The seminar is noteworthy; however, greater involvement with the county health department is an opportunity for increasing integration of perspectives from the field.

The SPH faculty appointment categories includes a "Clinical/Health Sciences Educator" that is non-tenure earning and allows for appointment of faculty with baccalaureate, master's, or a terminal degree. The appointment requires significant contributions in education and service, with reasonable contributions in research/scholarship.

Several faculty bring prior fulltime public health practice experience to their academic careers with the SPH (see section E2 of the ERF to view faculty CVs). These experiences vary widely and include military environmental and public health, county and state health departments, non-profit organizations, legislative offices, occupational medicine clinics, community mental health centers, members of local boards of health, state environmental regulatory agencies, domestic violence centers, and family resource centers.

Information regarding specific faculty that have practical experience prior to joining WVU.

Table E2-1.1: Faculty with Practice Experience	
Linda Alexander, EdD	Dr. Linda A. Alexander is a Professor in the Department of Social and Behavioral Sciences and currently serves as the Senior Associate Dean for Academic, Student, and Faculty Affairs for West Virginia University's School of Public Health. Her research primarily focuses on the complex understanding of the burden of tobacco related diseases among underrepresented and US socially disadvantaged and vulnerable populations. In addition to academic settings, Linda has over 25 years' experience working in and for underrepresented communities, which has helped shaped her expertise in culture's influence on health behavior. Her insights for the role of culture on health outcomes, especially in and among rural communities, was gleaned during her combined 10 years as a State Health Specialist at both Texas A & M University and University of Kentucky Agricultural Extension Service. She also applies this knowledge to the classroom when teaching public health students. During her time in academia, Linda has developed several courses with a focus on eliminating health disparities, and preparing a culturally competent public health workforce.
Lindsay Allen, PhD	Prior to joining WVU, Dr. Lindsay Allan has previously worked in the pharmaceutical industry, and as a senior health care technology analyst for the ECRI Institute.
Lauri Andress, PhD	For more than twenty years, Dr. Lauri Andress has provided community, media, and government relations to various non-profit organizations, government agencies, and elected officials. While serving as Managing Partner, Dr. Andress was responsible for guiding Andress & Associates to become a U.S. advisory firm on social and health inequities serving community-based organizations, and local and state health departments. Additionally, Dr. Andress worked for one of the leading U.S. experts on population health, Dr. Alvin Tarlov, at the Texas Program for Society and Health at the Baker Institute for Public Policy, Rice University. As the Director of Operations & Strategic Political Action, her work focused on research, policy advocacy, and message framing related to the social determinants of health.
Erik Carlton, DrPH	Dr. Carlton has nearly two decades of managerial and leadership experience in both the private and public sectors; and has consulted numerous hospital systems, health departments, and other healthcare organizations.
Diane Gross, DVM, PhD	joint appointment with the Monongalia County Health Department as the Regional Epidemiologist at the Monongalia County Health Department. She has over 25 years of clinical and epidemiological practice in the United States and internationally. During this time, she worked to prevent and control infectious diseases of public health importance as well as establishing and conducting surveillance, teaching, and performing research in more than 50 countries in Africa, Asia and Europe. Dr. Gross served as Senior Epidemiologist for the International Influenza Program at the CDC and the High Threat Pathogen Programme at the WHO Regional Office for Europe.

Sarah Knox, PhD	Prior to joining WVU Dr. Sarah Knox worked in DC for five years at the National Institute of Child Health and Human Development as a Senior Scientist and at the National Heart, Lung, and Blood Institute as a Research HSA.
Garrett Moran, PhD	Before coming to WVU he was a vice president at Westat, and served as Project Director of the Academy for Integrating Behavioral Health and Primary Care from 2010 to 2018. Dr. Moran is a clinical psychologist, a former state commissioner for behavioral health, and has nearly 45 years of experience in behavioral health care services research and implementation. He recently served as primary author on the Academy's Playbook for Medication Assisted Treatment. While at Westat he completed a study of the "Optimal Utilization of Psychosocial Support in Medication Assisted Treatment for Opioid Use Disorder" for the Office of the Assistant Secretary for Planning and Evaluation (OASPE) in the Department of Health and Human Services. While directing the Academy, he provided leadership for technical assistance efforts to AHRQ grantees working to implement medication assisted treatment (MAT) for opioid use disorder (OUD) in rural areas of five states. He was the primary author of the AHRQ report, "Implementing MAT for OUD in Rural Primary Care: An Environmental Scan." That report includes a summary of peer reviewed and grey literature on MAT, and addresses implementation challenges and strategies to overcome them. The Scan also provides links to an extensive roster of tools to aid in MAT implementation. Dr. Moran has consulted with a number of states working to restructure their health and behavioral health delivery systems and improve their ability to respond to the epidemic of opioid use disorder. From 1993 to 1996, Dr. Moran served as Deputy Commissioner, then Commissioner for Community Support, in the cabinet of the Secretary of the Department of Health and Human Resources for the State of West Virginia. He guided public policy related to people with mental or substance use disorders, developmental disabilities, and older adults. Dr. Moran has extensive experience combining quantitative and qualitative research methods and has particular interest in program evaluation and policy analysis, facilitated by his knowledge of state and local service delivery systems and the realities of implementing complex programs. He has managed multiyear, multimillion dollar studies with as many as 10 subcontractors, as well as a government organization with more than 2,400 employees. Dr. Moran is also a clinical psychologist whose early career included several years of direct clinical work with people with behavioral health disorders. He has served as a consultant on health issues to governments in the United States and abroad.
Michael McCawley, PhD	Dr. McCawley spent over 27 years as a Public Health Service Officer with the Centers for Disease Control and Prevention (CDC) at the National Institute for Occupational Safety and Health, studying miners' health, occupational respiratory disease, aerosol measurement and ultrafine

	particles. While there he worked on projects concerning exposure to wood dust, volcanic ash, diesels, coal mine dust, silica and beryllium. He retired from the US Public Health Service in 2001.
Sarah Woodrum, DrPH	More than two decades of healthcare management and strategic operations experience. Previously, Woodrum served as chief operating officer of Mon Health Medical Center in Morgantown, WV; chief administrative officer and senior associate dean for administration and finance at the WVU School of Medicine; and vice president of the medical group with NorthShore University HealthSystem in Evanston, Ill.

Adjunct Faculty

Table E2-1.2: Adjunct Faculty with Practice Experience		
Biostatistics		
Desta Fekedulegn, PhD	NIOSH	Course Instructor Fall 2019
Carlos Sordia, PhD	NIOSH	Course Instructor Spring 2020
Epidemiology		
Health Policy, Management and Leadership		
Ann L. Chester	Asst VP for Education Partnerships, Director of HSTA, Director of HCOP, Deputy Director of the Center of Excellence in Women's Health	
Rahul Gupta	Chief Medical and Health Officer, March of Dimes	
John Haddox	WVU Division of Design & Merchandising	Teaches, DSGN
Sandra Y. Pope	Director, WV Area Health Education Center	
Danny Scalise	Executive Director of the State Medical Association	
Lee Smith	Monongalia County Health Department	
David Woodrum		Teaches, PUBH 361
Occupational and Environmental Health Sciences		
Boyd, Jonathan	SOM Ortho	
Boyer, Douglas	NIOSH/OEHS instructor	
Doney, Brent	NIOSH	
Fortner, Alyson	NIOSH/OEHS instructor	
Kurth, Laura Marie	NIOSH	
Myers, Douglas	Boise St. U.	
Nett, Randall	NIOSH	
Rauscher, Kimberly	Boise St. U.	
Stoll, Syam	Occ med Cabell Huntington Hospital	
Virji, Mohammed Abbas	NIOSH	
Social and Behavioral Sciences		
Aboraya, Ahmed S	Chief of Psychiatry, Sharpe Hospital	Teaches, PUBH
Brumage, Michael R	Director, Preventive Medicine Residency Program; Medical Officer, ICRC	Teaches, SBHS
Buck, Katharine Joy	Professor, Morgantown and RCB HSC Eastern Division	Teaches, NSG
Chertok, Ilana Rivka	Ohio University	
Cottrell, Lesley Anne	Vice-Chair, Department of Pediatrics Research, Director, WV Center of Excellence for Disabilities	
Fitch, Cindy E	WVU Cancer Institute	

Harshbarger, David Dwight	WVU Medicine – Wellness Center	
Hartley, Tara A	NIOSH	
Leary, Janie Marie	Fairmont State U.	
Nash, Janet K	Retired	
Olfert, Melissa Diann	WVU, Davis College	Teaches, HN&F
Sharps, Gina Marie	Marshall University	
Zizzi, Samuel Joseph	WVU, CPASS	Teaches, SEP

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

Strengths: Both full-time and part-time faculty for the school teach and mentor students in core, foundation, concentration, or practice areas. Several Adjunct faculty affiliations are the result of ongoing and productive relationships with practice partners, Health Departments, NIOSH, Bureau of Public Health and State and local public health leaders.

Weaknesses: None noted

Plans: n/a

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 means through which the school ensures that faculty are informed and maintain currency in their areas of instructional responsibility. The description must address both primary instructional and non-primary instructional faculty and should provide examples as relevant.

All faculty members' time and effort (FTE's) is formally evaluated once a year through a required process of submitting their updated accomplishments to Digital Measures to create the Annual Productivity Report. This report is utilized by each faculty members' department chair to determine relevance in their respective area of instruction. This includes the department chair review of grant submissions, manuscript development and submissions, contributions to the state-of-the-field, and service on external committees and editorial boards. Chairs review information with faculty members in face-to-face meetings that take place after December 31 but prior to March 30. Written summary feedback is shared with the faculty member, with copies to the Dean and the Senior Associate Dean of Academic Affairs. (see example in sectionE3 of the ERF) All reviews take place prior to the development of the next academic year schedule to ensure appropriate alignment with instruction. The School has a fully articulated Standard Operating Guideline (SOG) for non-primary instructional faculty. The process for Adjuncts with any teaching responsibilities begins with a Department Chair letter that describes the role of the adjunct in teaching and/or mentoring. Faculty must review the request and an updated CV for the Adjunct candidate and formally vote "yes" or "no" for the candidate to be granted a teaching appointment. Departmental Administrative Assistant's provide documentation of the vote to the Senior Associate Dean for Academic Affairs. After the review of materials used in the decision-making process, the Senior Associate Dean for Academic Affairs makes a recommendation to the Dean as to whether or not an appointment should be made. The Dean communicates directly with the adjunct candidate.

In the Fall of 2017, the Chief of Staff on behalf of the Dean's Office and in consultation with the Senior Associate Deans requested transcripts of all faculty, including non-primary instructional faculty, and anyone with a teaching role in the School. Furthermore, this request is included in every faculty offer letter. Transcripts are uploaded to the faculty member's file in Digital Measures.

The School of Public Health defines non-instructional faculty as adjunct. To view the guidelines on offering an adjunct appointment, please see section E3 of the ERF.

2) 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.

Student Evaluation of Instruction reports (SEI's) are uploaded into Digital Measures so that as faculty complete their productivity reports information is automatically populated in the system. Issues identified based on student feedback are communicated directly to the respective program director with a copy to the Senior Associate Dean of Academic Affairs. The Senior Associate Dean for

Academic Affairs contacts the Department Chair and discuss options for remediation which may include removal from a course.

3) Describe available university and programmatic support for continuous improvement in faculty's instructional roles. 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.

Teaching and Learning Commons events and the Director of Assessment's role (faculty associate in 2017-18) https://tlcommons.wvu.edu/

HSC Teaching Scholars program https://www.hsc.wvu.edu/faculty-development/teaching-scholars-program/ (see who has graduated from this program?)

BIG 12 Faculty Fellowship Program (Albidso 2017-18-Carlton 2019-20)
https://faculty.wvu.edu/files/d/dc613298-7c91-4908-b925-bccb6e9a5aae/2019-2020-big-12-call-for-applications.pdf (both award letters from can be viewed in section E3 of the ERF)

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

Teaching excellence is a priority at WVU. Resources in the last three years to support the teaching enterprise are detailed below. All faculty at WVU except those with explicit research or clinical responsibilities are required to teach. During faculty evaluations done by the Promotion and Tenure Committee, the review of teaching is equivalent to research and service. All primary teaching faculty are required to have "Significant Contributions in Teaching". On page 6 of our current promotion and tenure guidelines, it states, *"All faculty (except those in the research and service specialty tracks) should have substantial involvement in educational programs, such as designing, instructing in, and evaluating educational programs and participating in department educational activities including committees.*

Education involves the dissemination of knowledge and the stimulation of critical thinking. Education includes not only traditional modes of instruction such as the classroom lecture, but also mentoring and precepting students, fellows, and faculty, on-line and distance education, clinical, laboratory, and practicum instruction; thesis and dissertation direction; facilitation of group learning; evaluation and critique of student self-directed learning; participation in various forums for continuing education, patient education, and non-traditional instruction; presentations in seminars, Grand Rounds and conferences; and advising. Outreach educational activities such as on-line education or instruction outside of the SPH facility as part of job duties should be evaluated as part of the educational outcomes."

5) Select at least three indicators, with one from each of the listed categories that are meaningful to the school and relate to instructional quality. Describe the school's approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the lists in the criteria, the school may add indicators that are significant to its own mission and context.

Faculty currency

- External reviews of proposed or existing courses or curricula, outside of normal university processes (Normal university processes include regularly-scheduled, university-mandated program reviews and routine curriculum committee reviews of new courses.)
- Peer/internal review of syllabi/curricula for currency of readings, topics, methods, etc.
- Annual or other regular reviews of faculty productivity, relation of scholarship to instruction
- Faculty maintenance of relevant professional credentials or certifications that require continuing education

Faculty instructional technique

- Frequency of internal quality reviews of existing courses or curricula
- Participation in professional development related to instruction
- Peer evaluation of teaching
- Student satisfaction with instructional quality

School- or program-level outcomes

- Courses that are team-taught with interprofessional perspectives
- Courses that integrate technology in innovative ways to enhance learning
- Courses that involve community-based practitioners
- Courses that integrate service learning, as defined by the school or program
- Courses that integrate community-based projects
- Courses that use higher-level assessments
- Courses that employ active learning techniques
- Teaching assistants trained in pedagogical techniques
- Implementation of grading rubrics
- Any other measure that tracks use of pedagogical techniques and is meaningful to the school or program

Faculty currency

- External reviews of proposed or existing courses or curricula, outside of normal university processes (Normal university processes include regularly scheduled, university-mandated program reviews and routine curriculum committee reviews of new courses.)

The SPH has a long history of working with the Curriculum Committee to review course proposals, update course syllabi, review course pre-requisites, adding or deleting majors, etc. In addition, courses and curricula relevant to the needs of the public health workforce are reviewed by external constituents and collaborative partners. Specific examples over the last three years include:

- Director of Kanawha Charleston Health Department (Dr. Mike Brumage, 2017) review of revised coursework for the Practice-based Experience
- Leadership Council review of CEPH 2016 changes in MPH

- WVU Health Systems Administrative Leadership review of the proposed Patient Navigator Program (Frank Briggs, etc. 2016)
- Deputy Director of NIOSH and Dawn Castillo review of workforce and injury courses and NIOSH Scholar in Residence (2017-2018)
- David McClure review of MHA (2018)
- The new Bachelor of Science program in Health Services, Management and Leadership reviewed by members of the Leadership Council.

- Annual or other regular reviews of faculty productivity, relation of scholarship to instruction

All faculty are evaluated annually to evaluate productivity. Teaching and Educational scholarship are defined and highlighted in the WVU Promotion and Tenure Guidelines, http://wvufaculty.wvu.edu/, as well as those guidelines for the SPH, http://publichealth.hsc.wvu.edu/media/4890/sph_p_and_t-current_guidelines-002.pdf.

Faculty instructional technique

- Participation in professional development related to instruction

Professional development opportunities are open to all Public Health faculty at both the University level: Teaching and Learning Commons https://tlcommons.wvu.edu/ and the Health Sciences Center level- HSC Faculty Development Program https://www.hsc.wvu.edu/faculty-development/. Our Director of Assessment has served as a faculty associate for the Teaching and Learning Commons (2017-2018), is an active member of the University Assessment Council (2016- present) https://undergraduate.wvu.edu/assessment/university-assessment-council, a lecturer for the Teaching Scholars Program https://www.hsc.wvu.edu/faculty-development/teaching-scholars-program/, a presenter for the Faculty Development Noon Hour https://www.hsc.wvu.edu/faculty-development/faculty-development-noon-hour-web-recordings/, an instructor for the Teaching Scholars Summer Institute https://www.hsc.wvu.edu/faculty-development/teaching-scholars-summer-institute/, and as both a discussion leader and panelist for the HSC Faculty Development Engagement Event https://www.hsc.wvu.edu/faculty-development/hsc-faculty-engagement-event/. Her involvement with the HSC Faculty Development Program has been ongoing since 2017. Acting as an informal liaison between the Teaching and Learning Commons and the HSC Faculty Development Program, the Director of Assessment also provides peer feedback to faculty across health sciences (including Public Health) to coach faculty in ways to improve their teaching practice. Faculty in the SPH have received one-on-one coaching in course design, development of learning outcomes, small group instructional methods, improvement of lecture techniques, and online teaching best practices.

Through the Teaching Scholars Program our SPH faculty currently provide the following professional development related to teaching practice:

- Robin Pollini: Implementation Science in Health Professions
- Christopher Martin: Writing Multiple Choice Questions
- Elizabeth Claydon: Qualitative Research Design
- Alfgeir Kristjansson: Quantitative Research Design
- Lesley Cottrell: Survey Research
- Heather Henderson: Peer Feedback

HSC Teaching Scholars Program Longitudinal Participants:

- Jennifer Lultschik, current

As part of the HSC Faculty Engagement Event which occurs yearly, SPH faculty have participated in professional development teaching training:

2018-2019 Participants:

- Diane Gross
- Audra Hamrick
- Jennifer Lultschik
- Sarah Woodrum
- Heather Henderson

2017-2018 Participants:

- Danielle Davidov
- Heather Henderson
- Ranjita Misra
- Ruchi Bhandari
- Sarah Woodrum

2016-2017 Participants

- Megan Smith
- Gordon Smith

School- or program-level outcomes

- Courses that involve community-based practitioners

The Director of Career Development and Student Success, Mr. Scot McIntosh, teaches the undergraduate course, PUBH 200 Introduction to Public Health Careers and Information. Students gain exposure to the roles and responsibilities of the public health workforce through guest lectures, experiential learning activities and discussions with professionals in the field. Students assess their own interests, skills, and personality to explore and describe their own career goals.

The course syllabus is available to view in section E3-School Outcomes of the ERF.

- Courses that integrate service learning, as defined by the school or program

Ms. Audra Hamrick, Assistant Professor SBHS took MPH students to conference with external partner to provide exposure to NGO's that tackle health issues.

In Charleston, WV, MPH students participated in the 2019 Center for Children's Justice Handle with Care Conference on October 16-18, 2019. The students helped convene sessions/collect evaluations as well as attended sessions on multiple topics and networked with government and non-profit agencies that tackle public health issues.

- Courses that integrate community-based projects
- Associate Professor, Dr. Christiaan Abildso, offers SBHS 613/SBHS 763 Program Evaluation in Public Health for graduate students. Both master and doctoral students gain practical experience by engaging stakeholders to create a program evaluation plan.
- Assistant Professor, Dr. Diane Gross, and Regional Epidemiologist for Mon County Health Department has fully integrate her practice-based epidemiology course with field experiences at the health department providing both service to the health department and a basis for teaching public health in the workforce from a "real-time" perspective.
- Dr. Ranjita Misra provides extensive collaboration through our work with the Mid-Atlantic Regional Training Center with actual products and deliverables to extramural partners. These experiences are a part of her Community Advocacy and Needs Assessment course (SBHS 617) that she co-teaches with Dr. Geri Dino.

Course syllabi are available to view in section E3-School Outcomes folder of the ERF.

Teaching assistants trained in pedagogical techniques

All Graduate Teaching Assistant's are trained formally, can enroll in teaching practicum and are required to attend the Graduate Teaching Assistant Orientation offered by the WVU Teaching and Learning Commons, https://tlcommons.wvu.edu/events-workshops/gta-orientation

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

Strengths: Our process and procedures for ensuring that faculty view the scholarship of teaching as a fundamental part of their roles and responsibilities at the SPH are well documented and supported by internal and external resources. We have a track-record of engaging external constituents in program delivery and design, especially collaborative partners who might benefit from training in these area as a direct result of certificate programs or course work.

Weaknesses: Although the School is actively engaged in ongoing solicitation of feedback for course development, and the evaluation of faculty on a systematic basis as part of annual reviews we currently do not have a formal faculty development plan with SMART GOALS.

Plans: In addition to plans for a more formal faculty development structure, the following plans have been articulated to Assistant Professors and those with primary teaching responsibilities"

- A Teaching Master Class utilizing the Teaching Public Health textbook (Galeo & Sullivan Eds)
- A Peer Mentoring Program
- A Teaching Incentive Plan
- Work with P& T Committee to require a Teaching Narrative/Portfolio

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.

Faculty effort is allocated to the three missions of the SPH, which are education, research/scholarship, and service. The outcomes in each are evaluated annually. A general definition of research, as provided by the WVU *Policies and Procedures for Annual Faculty Evaluation, Promotion and Tenure* is:

WVU values academic research activities that increase fundamental knowledge within the discipline, creative activities that reach out and serve humankind, and applied research activities that yield tangible benefits to society. Therefore, the impact of an activity is part of the measure of its quality. Historically, the measure of academic research and creative activities has been well defined by each discipline, often through peer-reviewed publications and performances and exhibitions. The significance of translational or applied research that results in public—private partnerships, patents, licensing, and/or other forms of commercialization and entrepreneurial activity should also be part of the evaluation of research.

Research may be discipline-focused and individual, or it may be interdisciplinary and collaborative. It is a critical component of the mission of the university, contributing to and expanding the general body of knowledge, thus infusing instruction and public service with rigor and relevance. It validates the concept of the teacher-scholar. Interdisciplinary and collaborative assignments should be identified in the appointment letter when possible, or in annual letters as assignments change. Unit guidelines should address the evaluative process for these activities. It should be noted that the advising of doctoral students has elements of both teaching and research.

In most disciplines, refereed publications (print or electronic) of high quality are expected as evidence of scholarly productivity. In some disciplines, the strongest such evidence may appear in published refereed proceedings rather than archival journals; such cases must be recognized in the college/school guidelines. In the arts and similar disciplines, an original contribution of a creative nature relevant to one or more disciplines may be as valuable as a publication of a scholarly book or article. In certain disciplines, the ability to secure funding may be necessary for the realization of scholarly output. Depending upon the discipline, entrepreneurial and commercialization activities related to intellectual property and patents, which benefit the university also demonstrate scholarly output. While quantity of effort and output must be sufficient to demonstrate an active and peer-

recognized presence in the discipline, quality of research is clearly of great value in determining the level of performance. Important evidence of scholarly merit may be either a single work of considerable importance (such as a book or monograph) or a series of smaller, high-quality products such as refereed journal articles constituting a program of worthwhile research. Faculty members are expected to undertake a continuing program of studies, investigations, or creative works. Criteria for the evaluation of research should be clearly stated in the unit guidelines. Performance evaluations should be passed on a holistic assessment of evidence provided in the file.

The SPH *Guidelines for Faculty Appointment, Promotion, and Tenure* (approved May, 2012) currently defines Research/Scholarly Activity as:

Research involves the creation and synthesis of knowledge, the creation of new approaches to understanding and explaining phenomena, the development of new insights, the critical appraisal of the past, and the application of knowledge and expertise to address needs in society and in the profession. Research may be discipline-focused and individual, or interdisciplinary and collaborative. Both research/scholarship productivity and excellence are expected. Scholarship may include scholarship in traditional research activities, education, and service, and must be peer-reviewed and in the public domain.

Some examples of scholarship include peer-reviewed articles in journals or conference proceedings, books and book chapters, patents, research-based educational media materials (for example, simulations, tutorials, etc.), developing new academic programs, receiving external grants or contracts for research as a result of written proposals, receiving research awards, and research-based development of software and other products that have a broad impact.

Educational scholarship includes contributions to the educational community to advance knowledge in the field. Some examples of educational products include: interactive learning exercises, electronically viewable sets with speaker notes, case studies, and new models and strategies for education. In order to be considered as peer-reviewed, these should be included in peer-reviewed venues or repositories, be evaluated from conference proceedings, education awards, be referenced in peer-reviewed materials, and show how adoption by other faculty including descriptions of how the product has been used as built upon.

Importantly, the SPH recognizes and values collaborative research that addresses top health priorities and disparities of WV and Appalachia, and informs the development of improved public health policy and practice.

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

WVU and SPH provide a variety of support for research and scholarly activities for faculty, staff, and students:

West Virginia University (WVU)

The WVU System is a family of distinctive campuses united by a single mission. The WVU System spans the state and includes 518 buildings on 15,880 acres.

Ranked in the highest tier of national doctoral research universities (R1 status) as described by the Carnegie Classification of Institutions of Higher Education, WVU is committed to engaging in research at the highest level. WVU faculty conduct research totaling over $185 million annually in sponsored contracts and research grants.

There is a variety of cutting-edge technology, equipment, instrumentation and other resources available to researchers at WVU.

The School of Public Health (SPH)

Through groundbreaking research and outreach programs, the WVU School of Public Health helps solve complex problems with local impact and global significance. The School's resources and capacity for research, innovation, discovery, and partnerships include several active research centers, services, and training organizations such as the Injury Control Research Center, the Health Research Center, the WV Prevention Research Center, the Office of Health Services Research, Occupational Medicine, the Public Health Training Center, and the Osher Lifelong Learning Institute.

The School of Public Health has a full-time Director of Research Administration, one full-time grants administrator, and a grants resources specialist to assist with grant administration. These positions also serve as a liaison with the WVU Office of Sponsored Programs and the Health Sciences Center's Office for Research and Graduate Education. All the staff members have experience with a variety of funding mechanisms and are well versed in the rules and regulations of Research Administration.

Robert C. Byrd Health Sciences Center (HSC)

The WVU HSC was created to serve the people of West Virginia and is considered a statewide health resource. The WVU HSC Vice President and Executive Dean reports to the President of the University and is responsible for integrating the research mission of the five schools. The Vice President is a point person for interactions with the HSC, WVU Hospitals (WVUH) / Ruby Memorial Hospital, and the physician-practice plan (University Health Associates) and bears responsibility for fiscal oversight. The five schools located within the Health Sciences Center are the School of Medicine, the School of Nursing, the School of Pharmacy, the School of Dentistry, and the School of Public Health. Each School has a Dean who reports to the Vice President and who oversees the research missions of their Departments and Centers. The HSC has outstanding research capacity, excellent graduate research training, and significant external research funding. In addition to professional education, each of the Schools at the HSC is involved in graduate training and research. HSC boasts all of the resources typical of a comprehensive academic medical center, including modern facilities, mainframe and workstation computer resources, telecommunications equipment, library resources, and technical support personnel.

WVU's Health Sciences encompasses three campuses: a modern medical complex located in Morgantown, West Virginia that includes 5 professional schools (Medicine, Dentistry, Nursing, Pharmacy and Public Health), its flagship hospital (J.W. Ruby Memorial Hospital), and five institutes – the WVU Cancer Institute, the WVU Critical Care and Trauma Institute, the WVU Eye Institute, the WVU Heart Institute, and the WVU Rockefeller Neurosciences Institute.

The HSC is home to several organized research groups who collaborate to set research priorities, allocate resources, and train and mentor young scientists:

- WVU Critical Care and Trauma Institute
- WVU Heart and Vascular Institute
- West Virginia Clinical Translational Science Institute (CTSI)
- Injury Control Research Center (ICRC)
- WVU Center for Diabetes and Metabolic Health
- WVU Cancer Institute
- WVU Eye Institute
- Rockefeller Neurosciences Institute
- Prevention Research Center (PRC)
- Center for Excellence in Disabilities

Several well-equipped core facilities support basic research at the HSC. The core facilities are significantly subsidized by institutional support and generally recover a portion of their operating costs on a charge basis. A designated individual manages the day-to-day operations in each core. These facilities have both user and service options. In addition to the designated cores, each of the basic science departments and the interdisciplinary research center in the WVU HSC have centralized common equipment rooms that are dedicated to supporting the investigators' research needs, with equipment such as scintillation counters, super-speed and ultra-centrifuges with a variety of rotor types, sonicators, FPLC, HPLC and mass spectrometry. The core facilities available to researchers are:

- Animal Models and Imaging Facility (AMIF)
- Biochemistry Protein Core Facility
- Biomedical Informatics Resources Core
- BioNano Research Facilities
- BioSpecimen Processing Core
- Center for Advanced Imaging (CAI)
- Cleanroom Facilities
- Clinical Trials Research Unit (CTRU)
- Experimental Stroke Care (ESC)
- Electron Microscopy Facility
- Flow Cytometry and Single Cell Core Facility (FCSCCF)
- Genomics Core Facility
- High Performance Computing Facility (HPC)
- In vivo Multifunctional Magnetic Resonance Center (IMMR)
- Inhalation Facility
- Materials Characterization Facilities
- Metabolomics Core
- Microscope Imaging Facility
- Mitochondria Phenotyping Service

- Office of Laboratory Animal Resources
- Pathology Research Histology Laboratory
- Preclinical Tumor Models Core Facility (PTMCF)
- Rodent Behavior Core Facility (RBC)
- Tissue Bank
- Transgenic Animal Core Animal Facility (TACF)

Office of Sponsored Programs (OSP)

The mission of the Office of Sponsored Programs (OSP) is to support the West Virginia University community in the acquisition and administration of externally funded projects for research, teaching, and service. OSP reviews and submits proposals and negotiates, accepts, and initiates awards on behalf of West Virginia University and the West Virginia University Research Corporation. The OSP is made up of a Director, Pre-Award Management (7 FTE), Award Negotiation Team (3 FTE), Award Initiation Team (6 FTE), and a Sub-Award/Contracts management team (2 FTE).

WVU Research Corporation (WVURC) Office of Research Integrity and Compliance

Comprehensive services and training related to IRB approval and HIPAA compliance are provided by the WVU Office of Research Integrity and Compliance. Their mission is to foster a culture of integrity and compliance within the University, ensuring that participants in the West Virginia University research enterprise internalize and pursue the goal of self-directed responsible conduct of research. Comprised of a Director/Conflict of Interest Officer, Office Manager, Human Subject Research team (5 FTE), and an Animal Welfare Program team (4 FTE), they operate as facilitators, educators, and a resource center for the WVU research community.

Sponsored Projects and Property Accounting (SPA)

Sponsored Projects and Property Accounting (SPA) plays an integral role in the institutional research mission by providing service to faculty and staff in the comprehensive financial administration of all sponsored research activity. The SRA office provides services in such areas as invoicing and billing, financial reporting, accounts receivable management, cash handling, fiscal compliance oversight, award closeout, audit and site review assistance, grants accounting system module maintenance, and other areas involving overall project management.

The SRA unit is comprised of four teams serving assigned colleges and departments. Each team is comprised of a Billing Representative and a Financial Representative serving the financial and administrative needs of their assigned areas. In addition to working closely with the academic departments and principal investigators, they also coordinate with the Office of Sponsored Programs and their sponsors.

Clinical Research Design, Epidemiology, and Biostatics (CRDEB) Core

The Clinical Research Design, Epidemiology, and Biostatistics (CRDEB) core provides services to clinical and translational researchers throughout the state of West Virginia. CRDEB offers researchers a central means to receive support from a comprehensive group of scientists with extensive biostatistical and epidemiologic expertise. CRDEB core scientists enhance clinical and translational research by utilizing existing methods and developing new methods in statistical data analysis and research design. Services include grant preparation, design of data collection systems, development and application of experimental and quasi-experimental research designs, and complex analytical methods.

WVU Libraries

The WVU Libraries encompass seven libraries, including the Downtown Campus Library, Evansdale Library, Health Sciences Library (Morgantown), Law Library, Health Sciences Library (Charleston), the Mary F. Shipper Library at Potomac State College in Keyser, and the WVU Institute of Technology Library in Beckley.

The WVU Health Sciences Center Library supports the schools of Medicine, Nursing, Pharmacy, Dentistry, and Public Health at the WVU Robert C. Byrd Health Sciences Center. The Health Sciences Library has research services librarians available to assist researchers with their project needs. Librarians are available at the Research Services Desk, via a chat feature for instant research assistance, or by individual appointments for in-depth consultations. This library provides access to an extensive collection, allowing users to connect to over 40,000 electronic journals, magazines, and newspapers. In addition, interlibrary loans are available free of charge to all faculty and students. The HSC Library features 55 computer workstations, 8 computer-equipped study rooms, and 2 computer classrooms.

The WVU Libraries also offer a Research Commons, a suite of services that fosters interdisciplinary connections and supports graduate student and faculty research needs, with an emphasis on graduate students and early-career researchers. The Research Commons suite provides services based on library expertise and partnerships with campus connections.

Computer Equipment and Services

Research Computing (RC), a shared research resource at WVU, is dedicated to supporting, enabling and advancing computational research at WVU. The RC provides access to centrally managed computational systems, storage systems, high-speed networking and virtual systems. They also provide researchers with the education and training needed to use these resources.

The West Virginia University School of Public Health (SPH) provides computing systems equipment and management to its five departments, including the Departments of Epidemiology, Social and Behavioral Sciences, Biostatistics, Health Policy, Management and Leadership, and Occupational and Environmental Health Sciences. The School of Public Health is a part of the Robert C. Byrd Health Sciences Center (HSC), which houses the Department of Information Technology Services (ITS). ITS maintains the computing infrastructure for HSC and has specialists in software design and computing, computer support, systems engineering, web design, audiovisual design and production, and so on. Staff members are also designated as Computer Support Contacts, a training and support network of technical personnel with software and computer expertise and experience who provide first-point-of-contact technical support to many end users at Health Sciences.

Information Technology Services presently maintains and supports all desktop and laptop computers allocated to faculty and staff, including research personnel, and 15 servers. All key personnel on this grant will have a Dell or comparable Desktop PC and access to all necessary current software through the SPH (including Microsoft Office suite, Endnote, SPSS, SAS, and other programs). To safeguard its computing systems, both West Virginia University and ITS invoke access restrictions, auditing systems, and policy management, as well as enterprise firewalls (the School has redundant PIX firewalls for its server infrastructure). Additionally, regular backups of all systems are maintained, including a combination of on-site and off-site vaulting of backup media.

Peripheral computing equipment located in the School of Public Health includes color LaserJet printers, high-speed, duplexing LaserJet printers, flatbed and hand-held scanners, digital cameras, a digital video recorder, and portable and ceiling-mounted computer video projection systems. The Health Sciences Center also maintains and supports a multimedia work lab. Other computing services readily available within the School or through the Health Sciences Center computing centers include digital imaging services, video digitalization and editing, videoconferencing, and support for interactive, multi-media instructional materials.

All faculty and staff in the School of Public Health, Health Sciences Center have offices that are fully equipped with furniture, local telephone service, and computer resources. They also have access to conference rooms, computer laboratory space, and additional office space designated for the research assistants within the School. A range of software is available, such as Microsoft Office, Endnote, SAS version 9.4 JMP 12, SPSS version 20, AMOS, Redhat, Symantec Ghost, WinZip, and Qualtrics. Adobe Creative Cloud and Adobe Photoshop/Premier Elements are available as publication and printing software.

West Virginia Clinical and Translational Science Institute (WVCTSI)

The West Virginia Clinical and Translational Science Institute (WVCTSI) is an academic home and a catalyst for clinical and translational research that targets priority health areas including addiction and resulting emerging epidemics (such as hepatitis C), cancer, cardiovascular disease, and chronic lung disease.

The West Virginia Clinical and Translational Science Institute was created to find real solutions for the health problems facing the people of West Virginia. In 2012, the WVCTSI received a National Institutes of Health IDeA Clinical and Translational Research (CTR) award totaling $19.6 million from the National Institute of General Medical Sciences. This grant was matched by a $33.5 million commitment from several West Virginia entities to create total funding of $53.1 million. In 2017, WVCTSI successfully secured renewed funding for an additional five years.

The WVCTSI is administratively housed within the WVU Health Sciences Center and serves as the coordinating entity for all clinical and translational scientists throughout the state.
WVCTSI has established crosscutting research partnerships among the WVCTSI partner institutions and collaborating Clinical and Translations Science Award (CTSA) institutions to increase research capacity to improve the health of West Virginians and Appalachians.
Participating faculty and clinicians across the state are provided with research resources that include biostatistics support, clinical data resources, community networks, pre-award support, and access to a range of funding mechanisms.

The WVCTSI has developed a strong infrastructure to increase the number of extramurally funded clinical and translational researchers and has grown capacity while developing new ideas and research opportunities to find real health solutions for West Virginians.

WVU Health System – Hospitals and Institutes

The West Virginia University Health System, the state's largest health system and largest private employer, is comprised of nine hospitals – its flagship hospital, J.W. Ruby Memorial Hospital in Morgantown; Berkeley Medical Center in Martinsburg; Braxton County Memorial Hospital in Gassaway; Camden Clark Medical Center in Parkersburg; Jefferson Medical Center in Ranson;

Potomac Valley Hospital in Keyser; Reynolds Memorial Hospital in Glen Dale; St. Joseph's Hospital in Buckhannon; and United Hospital Center in Bridgeport. It also provides management services to Summersville Regional Medical Center in Summersville, Wetzel County Hospital in New Martinsville, and Garrett Regional Medical Center in Oakland, Maryland. The WVU Health System also include five institutes – the WVU Cancer Institute, the WVU Critical Care and Trauma Institute, the WVU Eye Institute, the WVU Heart and Vascular Institute, and the WVU Rockefeller Neuroscience Institute.

Shared Resources

WVU researchers have access to a variety of cutting-edge technology, equipment, instrumentation and other resources. All facilities and programs are staffed with knowledgeable personnel who have expertise with using the equipment and can provide training and support.

There are several shared research facilities and laboratories available at the Robert C. Byrd Health Sciences Center, including facilities for microscope imaging, transgenic animals, flow cytometry, biospecimen processing, and genomics. The core facilities are generally operated on a charge basis with a designated individual to run the day-to-day operations. These facilities have both user and service options. In addition to the designated cores, each of the basic science departments and the interdisciplinary research centers in the WVU HSC have centralized common equipment rooms dedicated to supporting the investigators' research needs, with equipment such as scintillation counters, super-speed and ultra-centrifuges with a variety of rotor types, sonicators, FPLC, HPLC, and mass spectrometry.

Mountaineer Doctor Television (MDTV)

Mountaineer Doctor Television (MDTV) was established in 1992 to better serve rural West Virginians through advancements in technology. MDTV is a state-wide telehealth network delivering services in clinical telepsychiatry consultations, professional continuing education, patient/community education, distance learning, and admissions teleconferencing. MDTV staff work directly with WVU departments to assist them with their collaboration efforts across campuses and to expand and enhance community outreach and education initiatives by utilizing video conferencing technologies.

The Department of Behavioral Medicine and Psychiatry, in conjunction with MDTV, currently operates 32 telepsychiatry clinics throughout the state of West Virginia. These clinics provide child and adolescent, adult, and addiction related psychiatric services to clients in 15 counties with extensive catchment areas past county borders. Addiction related services also include provision of much-needed care to pregnant mothers. Services have expanded to include the education of rural clinic providers and psychiatry residents.

3) 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.

- **Dr. Christa Lilly**, Associate Professor, Biostatics, uses de-identified data from the CARDIAC award she is a key personnel on as example datasets for her applied Biostatistics class, BIOS 603. In these classes, Dr. Lilly encourages students to replicate the analysis that have been published on that dataset as a real-life example and learning tool for the course.
- **Dr. Sarah Knox**, Professor in Epidemiology, uses her population based research in the areas of heart disease, toxicology and cancer in her instruction of students including EPID 711 (Methodological Issues in Design & Analysis of Cohort Studies), and EPID 740 (Gene X

Environmental Interactions and Chronic Diseases). She uses examples of contradictory results published in literature to demonstrate how method and the decision of which variables to include in the study determine the outcome. She also places emphasis on the difference between mediators and confounders. This helps students ultimately understand the context of the specific research question they are asking.

- **Dr. Steve Davis**, Associate Professor in Health Policy, Management and Leadership and Adjunct Professor in Emergency Medicine, uses his experience as a PI on his "Examine telehealth provision of services for disabled population in Medicaid" contract with WV DHHR to his project management course, PUBH 338 (Public Health Project Management). In this class, he provides students with many real-world examples that relate directly to this project and the principles of project management, such as using S.M.A.R.T. criteria when writing measurable project objectives. He then gives the initial objectives that were drafted in the design phase of the project that did not explicitly conform to the S.M.A.R.T. criteria due to the equally important issue of stakeholder management.
- **Dr. Travis Knuckles**, Assistant Professor in Occupational and Environmental Health Sciences, conducts research primarily focused on the cardiovascular health effects on inhaled particulate matter. He incorporates this research broadly in both an undergraduate course PUBH 241 (Biological Basis of Public Health), and a graduate course OEHS 622 (Public Health Toxicology). In the undergraduate course, the focus is on the consequences to public health from high levels of air pollution and specifically, particulate matter. The students gain an appreciation of both the worldwide impact of particular matter, as well as, the laws and protections in place here in the United States. In the graduate course, the students learn the specific mechanistic consequences of particular matter exposure. Data from not only his research, but also countless studies on the negative health consequences of particulate matter inhalation exposure is reviewed with students and utilized in the classroom to provide real-world examples.
- **Dr. Christiaan Abildso**, Assistant Professor in Social and Behavioral Sciences and Program Director of Research and Evaluation for the Health Research Center, uses his research in community-based, theory-driven program evaluation using the CDC's Evaluation Framework to help design his SBHS 613 (Public Health Program Evaluation) and 763 (Advanced Evaluation Public Health) courses. This work is based on strong stakeholder engagement. Students in these classes are assigned a client at the beginning of the semester, meet with that client three times, and produce an evaluation presentation and report for stakeholders that is data- and theory-driven. On two occasions, students with Dr. Abildso had peer-reviewed manuscripts published from the course activities and findings.

4) Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities.

- **Two Biostatistics masters' students**, (MS Biostatistics), were working with Dr. Sijin Wen, Associate Professor, Biostatistics, on the NIH grant U54 West Virginia IDeA-CTR award, which resulted in one publication in which one student was the first author, "Environmental Pollution" in 2019, and a second publication in which the second student is the 5th co-author, "BMC Medical Education" in 2019.
- **Dr. Toni Rudisill**, Research Assistant Professor in Epidemiology, is a mentor for the MS1 program, where she mentors a first year medical student on a research project. The research project is related to her current research. The MS1 program awards a stipend to the medical

student for 8 weeks in the summer. Her current MS1 student is also a co-author on a manuscript from the project.

- **Dr. Lindsay Allen**, Assistant Professor in Health Policy, Management, and Leadership, works with students both in her research and in collaboration on papers. One student is a dual MD/MPH student working with her on a paper on redefining access to care supported by start-up funds. Dr. Allen also works with an MPH student supported on a Benedum Foundation award to establish and maintain a partnership that will provide health data analytics expertise, program evaluation, and project management and technical support to WV DHHR, which has also resulted in multiple opioid-related papers.
- **Dr. Weimin Gao**, Chair and Professor, Occupational and Environmental Health Sciences, does interprofessional work with a Clinical and Translational Science Institute (CTSI) PhD student in his lab. This student also works with Dr. Gao on his ongoing NIH grant as well as other collaborative projects.
- **Three students**, one undergrad student, one masters' student (MPH), and a doctoral student in Social and Behavioral Sciences, have all worked with Dr. Keith Zullig, Professor and Chair, Social and Behavioral Sciences, on the CDC-funded Mindfulness-Based Relapse Prevention Intervention award. This award has also lead to interprofessional collaborations for the students with the WVU School of Nursing on a new loneliness study, which uses data from the Mindfulness award.

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

The process of faculty evaluation for the SPH generally follow the process outlined by the University including annual evaluation, evaluation for promotion in rank, and evaluation of tenure-track faculty for the award of tenure.

Each department, division, and/or program Chairperson has responsibility for determining for each faculty member (with personal consultation) his/her instruction, research, and service assignments at the time of appointment and annually thereafter.

Activities of SPH faculty are sufficiently diverse as to require several appointment tracks as well as some expansion, definition and clarification of requirements for promotion and tenure within each of these tracks. These multiple appointment tracks within the SPH should be recognized as parallel tracks without implied or intended hierarchy:

- Scientist and Scientist Collaborator Tracks (both tenure earning):
  - Scientist: 70%+ research; significant contribution in research and education
  - Scientist Collaborator: 70%+ research (50%+ collaborative and 20%+ independent (while independent publications are expected, funding may include a PI effort))
- Scientist Educator Track (non-tenure)
- Professional Program Tracks (both tenure and non-tenure):
  - Health Sciences Educator-Scientist (tenure earning): <30%+ research effort
  - Clinical/Health Sciences Educator (non-tenure)
- Clinical Tracks (both non-tenure and tenure):
  - Clinician (non-tenure): 0% research
  - Clinical Educator (non-tenure): 0% research

    - Clinical Scientist (non-tenure): 50%+ research
- Specialty Tracks (non-tenure): at least 95% Research or 95% Teaching

Clearly written guidelines with stated expectations for faculty performance, and reliable and fair Promotion and Tenure processes promote the SPH and individual department success and effective faculty development, evaluation, retention, and promotion. Specific criteria and guidelines for each track are provided in the WVU SPH Guidelines for Faculty Appointment, Promotion, and Tenure document. Appointment to Associate and Full Professor in the Tenure and Specialty Research Tracks require independent reviews of SPH faculty productivity and performance from recognized researchers/scholars at peer-institutions who are at or above the rank for which promotion is sought. For promotion to Full Professor, both Tracks also require evidence of a national/international reputation. SPH Guidelines identify evidences of national/international reputation to include "invitations to edit or review for national/ international journals; invited service on national/international research advisory or review panels; election to office in national/international professional academic organizations; serving as a consultant to national/international agencies; and invitations to give state-of-the-art lectures at national/international meetings, to organize symposia, and/or to serve as moderator or session chair at national/international scientific meetings."

In the annual review, both the Promotion and Tenure Committee and the department chairs use a four-item scale, (Excellent, Good, Satisfactory, Unsatisfactory), to evaluate faculty performance and productivity in the areas of education, research, and service of each faculty member, as pertinent to the letter of agreement.

In cases of faculty seeking promotion and/or tenure, the SPH Promotion and Tenure Committee and Department Chairs conduct independent cumulative reviews of faculty performance and productivity in the areas of education, research, and service, relative to the SPH guidelines as appropriate. To obtain promotion and/or tenure, the faculty must make "significant contributions" in their primary area(s) and "reasonable contributions" in others. Promotions will be based primarily on achievement since the previous promotion (or appointment).

Transition to New Guidelines

The SPH is completing the process of revising its current Promotion, Tenure and Evaluation Guidelines that were approved in May, 2012. These revisions reflect a deliberate departure from School of Medicine Guidelines for Clinical and Teaching Faculty from which the current SPH Guidelines were originally developed. Moreover, the revised guidelines are aligned carefully with expectations from CEPH, reflect the required focus on practice, and allow specific departmental input in terms of scholarly activities and evidence toward excellence in each respective criteria.

SPH Administration will work with the SPH Promotion and Tenure Committee for final approval, roll out, and implementation for the 2020 evaluation review period.

6) Select at least three of the measures that are meaningful to the school and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. 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.

Table E4-1: Outcome Measures for Faculty Research and Scholarly Activities						
Outcome Measure	Target	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Achieving total dollar amount of grants and contracts expenditure to $4 million by 2016	$4,000,000	$3,792,929	$5,122,558	$5,668,834	$5,666,865	$5,348,650
Achieving total research dollars per primary faculty headcount of > $100,000	> $100,000	$436,958	$358,157	$366,913	$334,860	$270,057
Providing an ongoing clinical research design, epidemiology, and biostatistics consulting service that facilitates research collaborations and partnerships	Operational clinical research design, epidemiology and biostatistics consulting service	Provided 16 consultations	Provided 85 consultations	Provided 96 consultations	Provided 134 consultations	Provided 123 consultations (or 485.25 hours of consultation)*
Number of articles published in peer-reviewed journals		100	111	109	101	10**
Number of presentations at professional conferences/ meetings		160	134	164	182	109**

*Prior to 2018-2019, the number of hours spent on a consultation was not available.
**Full data not available, as reported data is not due from faculty until 12/31/2019.

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

Strengths:

- The SPH Research Office now has a Director of Research Administration, who works with SPH faculty and others throughout the university to develop a school-wide strategic plan for research.
- Research within the SPH is consistent with its mission, goals, and objectives.
- The University and the School provides an environment that is conducive to research and scholarship.
- The school provides opportunities for student involvement and success in research.

Weaknesses:

- The faculty have identified a need for a more comprehensive cadre of individuals to service faculty research needs.

Plans for Improvement:

- The SPH Research Office Director of Research Administration, will develop a school-wide strategic plan for research. This plan will identify specific additional research targets, thematic areas of emphasis for further investment and development, junior faculty mentoring plans, and associated timelines for achieving the plan's stated objectives.
- The SPH Office of Research hired a second grants administrator who will provide additional centralized pre- and post-award support. This person starts the first week of November.

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.

Linda, please review all materials in ERF for evidence to address all of the detailed questions in this example.

1) Describe the school's definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations.

In the current Promotion and Tenure document, the school defines faculty service as:

Professionally oriented community and/or extramural service includes activities in which a faculty member serves as a representative of the University in a professional capacity, such as serving as members or officers in state or national public health organizations or professional societies or other service related organizations or communities; grant and manuscript reviewers; members of test committees for professional certification; and participation in state, regional, national, and international science/public health-related conferences. Outreach activities, including educational activities, within the state on behalf of the School of Public Health should be evaluated as part of administrative service. Civic club activities, hobbies, sports, or non-professional interests are not considered criteria for promotion.

The University defines service as:

In keeping with its tradition as a land-grant institution, the university is committed to the performance and recognition of service activities on the part of its faculty as essential components of its mission. Enlightened perspectives, technical competence, and professional skills are indispensable resources in coping with the complexities of modern civilization. Service by faculty members to West Virginia is of special importance to the university mission.

The evaluation of service should include assessments of the degree to which the service yields important benefits to the university, society, or the profession. Especially relevant is the extent to which the service meets the needs of clients, induces positive change, improves performance, or has significant impact on societal problems or issues. One important benefit of service to the university is faculty participate in the governance system. Service contributions considered for evaluation are those that are within a person's professional expertise as a faculty member, and performed with one's university affiliation identified. The definition of the nature and extent of acceptable service for purposes of promotion and tenure should be identified in the unit's evaluation

guidelines. Criteria for the evaluation of service should be clearly stated in the unit guidelines. Performance evaluations should be based on a holistic assessment of evidence provided in the file.

WVU's commitment to the public good is evidenced across the institution, through its mission statement, a culture of service, and robust engagement with WVU's internal and external constituencies throughout West Virginia and beyond. The Carnegie Foundation has recognized WVU with their selective Community Engagement Classification, https://communityengagement.wvu.edu/. In addition, WVU has received awards from several other external entities for public service, and the institution annually presents internal awards for faculty, staff, and students recognizing meritorious public service. As one of the state's largest employers, WVU and its academic medical system play a direct role in the economic success of north central West Virginia.

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

WVU Community Engagement Initiative offers an academic community engagement development series, https://service.wvu.edu/faculty-staff/community-engagement-resources-and-opportunities/academic-community-engagement-development-series. In addition to events there are opportunities to apply for internal and external grants, https://service.wvu.edu/faculty-staff/community-engagement-resources-and-opportunities/community-engagement-grants.

3) Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students.

Several of our faculty engage students in providing a meaningful service learning and research experience to address the myriad public health problems affecting our State. For example,

Example 1 – Dr. Ranjita Misra and Dr. Lee Smith, Director Monongalia County Health Department (MCHD), were awarded a Community Engagement grant that provided subsidized radon testing and generated robust estimates of radon levels to inform WV policy makers of early radon detection and remediation.

Example 2 – Dr. Carlos Siordia, Adjunct Associate Professor. Students developed manuscripts and delivered an oral presentation of Health Equity in the Workplace for the course PUBH 442 Public Health in the Workplace. The basis for the in-class assignment is actual data from one of Dr. Siordia's NIOSH projects in the division of epidemiology. Additionally, students were instructed to incorporate health equity and social determinants of health frame into their project. Student abstracts are available to view in section E5 of the ERF.

Example 3 – Dr. Mike McCawley, Associate Professor in Occupational and Environmental Health. Dr. McCawley has worked on projects with citizen groups in Charleston, WV and in the six most southern counties in the state on issues concerning Mountain top mining. He has also appeared before the state legislature and the US House of representatives to inform lawmakers on the environmental health issues in northeastern Pennsylvania with a citizen's group called Breathe Easy Susquehanna Count on unconventional natural gas drilling operations, as well as in southwestern Pennsylvania with a citizen's group called the Southwest PA (SWPA) Environmental Health project. In addition to service

with regional stakeholders, Dr. McCawley has worked in the West Virginia counties of Doddridge and Wetzel. Information to these community-engaged stakeholders has been through public forums, radio, press and television. Recently, the League of Women Voters of PA, Pittsburgh invited Dr. McCawley to be on a planning board for a scientific forum on environmental health issues with colleagues from Columbia University, Johns Hopkins, Berkley, Colorado and the University of Pittsburgh. Dr. McCawley infuses lecture content from these community engaged experiences. He has also engaged one of our doctoral students, Ms. Maya Nye in providing support in these areas. Her experience is documented in methods in her dissertation proposal focused on the community's needs in environmental disasters.

4) Describe and provide three to five examples of student opportunities for involvement in faculty extramural service.

- Our undergraduate program is often highlighted in the WVU Service-Learning Showcase: https://service.wvu.edu/faculty-staff/recognition/service-learning-showcase
    - Spring 2019
        - PUBH 352
        - PUBH 491
    - Fall 2018
        - PUBH 352
        - PUBH 491
    - Fall 2017
        - PUBH 352

    To view the impact report for each of the above PUBH courses, please see section E5-Student Examples in the ERF.

5) Select at least three of the indicators that are meaningful to the school and relate to service. Describe the school's approach and progress over the last three years for each of the chosen indicators. 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. Schools should focus data and descriptions on faculty associated with the school's public health degree programs.

- Percent of faculty (specify primary instructional or total faculty) participating in extramural service activities
- Number of faculty-student service collaborations
- Number of community-based service projects
- Total service funding
- Faculty promoted on the basis of service
- Faculty appointed on a professional practice track
- Public/private or cross-sector partnerships for engagement and service

Service is a critical expectation for all faulty at WVU in part due to our mission as a land-grant institution and our role as the State's flagship institution. Faculty demonstrate overall contributions to research, teaching or service dependent upon their appointment "track" but those with Scientist Educator,

Professional Programs, Clinical Tracks, and Specialty Tracks are required to make "*significant contributions to service*." Performance indicators for *Significant Contributions in Service* are spelled out in the P& T documents provided to faculty upon their appointment to the school. Additionally, the offer letter developed by our Senior Associate Dean for Administration prepared for those in the aforementioned tracks, contains explicit language with regard to expectations in service as part of the evaluation/promotion process. The school is also pleased that all of the official "Centers" housed in the School of Public Health have a significant number of projects that facilitate both faculty-student service collaborations, and community-based service projects. Finally, we have a longstanding relationship with West Virginia Department of Health and Human Resources (WVDHHR) and through this connection in addition to faculty serving as project evaluators and grantees for special projects, a number of the services provided by our faculty constitutes both engagement and service activity.

It is also noteworthy to acknowledge the significant number of our faculty and staff who serve the community on local boards and agencies outside of the scope and prevue of their regular assignment in the University. This reference includes service on Mon County Health Department board (Dr. Keith Zullig), https://www.monchd.org/, Morgantown Rotary Club http://www.rotaryclubofmorgantownwv.org/, and WV Osher Life Long Learning Institute https://olliatwvu.org/ (Dr. Sarah Woodrum), Girls on the Run https://www.facebook.com/GOTRNCWV (Ms. Audra Hamrick), and Caritas House https://www.caritashouse.com/ (Ms. Katharine Belcher), among others.

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

The process of faculty evaluation for the SPH generally follow the process outlined by the University including annual evaluation, evaluation for promotion in rank, and evaluation of tenure-track faculty for the award of tenure.

Each department, division, and/or program Chairperson has responsibility for determining for each faculty member (with personal consultation) his/her instruction, research, and service assignments at the time of appointment and annually thereafter.

Activities of SPH faculty are sufficiently diverse as to require several appointment tracks as well as some expansion, definition and clarification of requirements for promotion and tenure within each of these tracks. These multiple appointment tracks within the SPH should be recognized as parallel tracks without implied or intended hierarchy:

- Scientist and Scientist Collaborator Tracks (both tenure earning):
  - Scientist: 5%+ service; reasonable contribution in service
  - Scientist Collaborator: 5%+ service; reasonable contribution in service
- Scientist Educator Track (non-tenure)
  - Significant contribution in service
- Professional Program Tracks (both tenure and non-tenure):
  - Health Sciences Educator-Scientist (tenure earning): 10%+ service effort; reasonable contribution in service
  - Clinical/Health Sciences Educator (non-tenure): significant contributions in education and service
- Clinical Tracks (both non-tenure and tenure):
  - Clinician (non-tenure): significant contribution in service

    - Clinical Educator (non-tenure): significant contribution in service
    - Clinical Scientist (non-tenure): significant contribution in service
- Specialty Tracks (non-tenure): at least 95% Service or 95% Research or 95% Teaching

Clearly written guidelines with stated expectations for faculty performance, and reliable and fair Promotion and Tenure processes promote SPH and individual department success and effective faculty development, evaluation, retention, and promotion. Specific criteria and guidelines for each track are provided in the *WVU SPH Guidelines for Faculty Appointment, Promotion, and Tenure* document. Appointment to Associate and Full Professor in the Tenure and Specialty Research Tracks require independent reviews of SPH faculty productivity and performance from recognized service/scholars at peer-institutions who are at or above the rank for which promotion is sought. For promotion to Full Professor, both Tracks also require evidence of a national/international reputation. SPH Guidelines identify evidences of national/international reputation to include "Leadership in national professional organizations, service on editorial boards or specialty boards, serving on national/international advisory committees, service on grant study sections, serving as a consultant to a national/international agencies, election to office in national/international professional academic organization."

In the annual review, both the Promotion and Tenure Committee and the department chairs use a four-item scale, (Excellent, Good, Satisfactory, Unsatisfactory), to evaluate faculty performance and productivity in the areas of education, research, and service of each faculty member, as pertinent to the letter of agreement.

In cases of faculty seeking promotion and/or tenure, the SPH Promotion and Tenure Committee and Department Chairs conduct independent cumulative reviews of faculty performance and productivity in the areas of education, research, and service, relative to the SPH guidelines as appropriate. To obtain promotion and/or tenure, the faculty must make "significant contributions" in their primary area(s) and "reasonable contributions" in others. Promotions will be based primarily on achievement since the previous promotion (or appointment).

Transition to New Guidelines

The SPH is completing the process of revising its current Promotion, Tenure and Evaluation Guidelines that were approved in May, 2012. These revisions reflect a deliberate departure from School of Medicine Guidelines for Clinical and Teaching Faculty from which the current SPH Guidelines were originally developed. Moreover, the revised guidelines are aligned carefully with expectations from CEPH, reflect the required focus on practice, and allow specific departmental input in terms of scholarly activities and evidence toward excellence in each respective criteria.

SPH Administration will work with the SPH Promotion and Tenure Committee for final approval, roll out, and implementation for the 2020 evaluation review period.

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

Strengths: We have a formal expectation of service for our faculty, staff, and students which is demonstrated through promotion and tenure evaluations, our mission, vision and values as a land grant, and as part of our social justice mission in public health.

Weaknesses: None noted

Plans: n/a

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.

School of Public Health Leadership Council (SPHLC)

- Comprised of exceptional leaders from many disciplines, including business, education, natural resources, government, and healthcare.
- Dr. Catherine Slemp, who currently serves as the State Health Officer and Commissioner of DHHR's Bureau for Public Health will assume the role of Committee Chair in academic year 2020-21.
- The Leadership Council works to strengthen the School's impact by advising and assisting the Dean in developing and executing strategies related to admissions, development, and advocacy.

Name and Credentials	Professional Affiliation
J. Fred Earley, II	Bowles Rice, Attorney, Health Care Team
John T. Fahey	United Bank, Senior VP, Corporate Marketing Director
R. Dean Hartley	Hartley Law Group, Attorney and Partner
Margaret M. Kitt, MD, MPH, RADM	NIOSH, Deputy Director for Program
Father Brian O'Donnell, SJ	Catholic Conference of WV, Executive Director
Stuart Robbins	Retired/Businessman
Scott Rotruck	Orion Strategies, Sr. Account Executive
Catherine C. Slemp, MD, MPH	WVU DHHR, Bureau for Public Health Commissioner and State Health Officer
Ron D. Stollings, MD FACP	WV State Senator, 7th District
John R. Unger, II	WV State Senator, 16th District
Frank Vitale	Forge Business Solutions, President & CEO
Robert "Bob" Walker, MD	WV Higher Education Policy Commission, Consultant to the Division of Health Sciences
Mary Aldred-Crouch	Ohio Valley Physicians, Director of Behavioral Health
Emma Eggleston	WVU Health Sciences Eastern Division, Associate Vice President and Dean, School of Medicine
Mohannad "Ned" Kusti, M.D.	U.S. Steel, Corporate Medical Director

David McClure	WVU Health Systems, Vice President, Strategic Initiatives

Alumni Leadership Council (ALC)

- Members represent all programs offered by our School (BS, MPH, MS, and PhD)
- Provides feedback on alumni engagement, student mentorship, and educational readiness.

Name and Credentials	Professional Affiliation
Penelope Allison, PhD, MPH	NIOSH, Associate Service Fellow
Julia Blackwood, MPH	
John Blosnich, PhD, MPH	VA Pittsburgh Healthcare System, Center for Health Equity Research and Promotion, Research Health Scientist
Brittany Brooks, MPH	WVU Medicine, Business Optimization Strategist
Amber Brown, MPH	VA Central Western Massachusetts, Grants Management Specialist
Laura Cooper, MPH, BS	WV Department of Environmental Protection, Environmental Resources Analyst
Brent Doney, PhD, MPH, MS	NIOSH, Industrial Hygienist
Heather Downey, MPH, MPA, MLS	Roane General Hospital, Executive Director of Population Health, Quality, and Infection Prevention
Rebecca Fint-Clark, MPH, BS	WVU Extension for Monongalia County, 4H and Youth Development, Extension Agent
Kate Flack, MPH	WV Child Advocacy Network, Chief Executive Officer
Sarah Hanks, MPH	Clemson University, Emerging Scholars, Associate Director
Keaton Hughes, MPH	New Mexico Department of Health, Syndromic Surveillance Epidemiologist
Michael Jude, MPH	Oregon Health and Science University, Senior Performance Improvement Consultant
Laura Kurth, PhD	NIOSH, Senior Service Fellow
Brian Linkous, MPH	WVCTSI Site Coordinator, Research Associate
Shannon McBee, MPH, CHES	WV Bureau for Public Health, Division of Infectious Disease Epidemiology, Syndromic Surveillance Director
Megan O'Dell, MPH, RN	WVU Medicine, Orthopedics, Registered Nurse
Sheena Sayres, MPH	WV CTSI, Grant Program Coordinator
Gina Sharps, MPH	WV Oral Health Coalition, Coordinator
Kara Viggiano, MPH	UPMC Freddie Fu Sports Medicine Concussion Clinic, Clinical Research Coordinator
Sarah Geiger, PhD	Northern Illinois University, Public Health, Associate Professor
Jennifer Nguyen, MPH	WVU Medicine, Center for Quality Outcomes, Quality Coordinator
Emily (Sasala) Kendrick, MS	FedEx Supply Chair, Business Data Analyst
Courtney Newkirk, MPH	LifeBridge Health, Clinically Integrated Network, Engagement Manager
Emily Jenkins, MPH	NIOSH, Regular Fellow
Angy El-Khatib, MPH	Miami Valley Hospital Systems, Program Manager
Natasha McKenzie, BSPH	Social Security Administration
Kenna (Balducci) Riddle, BSPH	
Elly Myers, MPH	Drug Free Moms and Babies, SOM OB/GYN, Project Coordinator
Megan Ross, MPH	WV Bureau for Public Health, Epidemiologist
Angela Javurek, MPH	US Army, Officer Candidate
Karla Davison, BSPH	

Lauren Gerchufsky, MPH	University of Charleston, Student in Physician Assistant Program

Strategic Planning Task Force (2019 Strategic Vision and Compass)

Name and Credentials	Professional Affiliation
Josh Austin, MA	The Health Plan, Director of Provider Strategic Initiatives
David McClure, PhD	WVU Health System, VP Strategic Initiatives
Leslie Miele,	WVU HSC, Associate VP and Chief Strategy Officer

Site Preceptors

- Public Health practitioners and professionals
- Provides feedback on practical field experiences

Agency Name	Preceptor
Bartlett Housing Solutions	Helen Panzaroni MSW Grant & Resource Manager
Bridgeport Farmer's Market	Debbie Workman, Director
Cabell-Huntington Health Department	Elizabeth Adkins, MS Director of Health & Wellness/PIO
Cabin Creek Health Systems	Michael Brumage, MD, MPH Medical Director
Conscious Harvest Cooperative	Megan Govindan, MPH, MS, RDN, LDN President
Court Appointed Special Advocates (CASA) for Kids of Monongalia and Preston County	Kayla Benson, MPA Executive Director
Freeport Dental Clinic, Oh	Amber Bauer, DDS
Girls on the Run of North Central West Virginia	Joanna Mizener, MS, Executive Director
Healthy Grandfamilies-West Virginia State University	Bonnie Dunn, MS Project Director
Hospice of Midland, TX	Jacque Burklow, RN BSN CHPCA Chief Operating Officer
Johns Hopkins Bloomberg School of Public Health	Meike Schleiff, ND, DrPH, MSPH
Mid-Ohio Valley Health Department	Executive Director (vacant) and Mary Beth Shea, RDH, Oral Health Coordinator
Mineral and Pendleton County Health Departments	Kimberly Kline, MLS(ASCP), Regional Epidemiologist
Monongalia County Prevention Coalition/Partnerships for Success	Jonnie Kifer, MSW Project Director
Monongalia County Health Department	Brittany Irick, MPH, Grants Manager & Special Project Coordinator
Monongalia County Health Department-Threat Preparedness	Jamie Moore MPH Threat Preparedness Coordinator, Epidemiologist
Monongalia County Health Department-WIC Program	Anne MacBridge,MS, RD,LD Director
Mylan Pharmaceuticals Inc.	George Dadisman, MA, Senior Clinical Data Specialist
NIOSH DRDS (division of respiratory disease studies)	Randall Nett, MD, MPH

NIOSH DSR (division of safety research)	James W. Collins, PhD, MSME, Associate Director for Science
NIOSH/HELD (health effects laboratory division)	Erin McCanlies, PhD, Research Epidemiologist
Northern West Virginia Rural Health Education Center	Amanda White, MPH, CHES Executive Director
Ohio Valley Health Services and Education Corporation	Michael Caruso, MBA, President and Mary McKinley, MSN, Director of Education
Osher Lifelong Learning Institute (OLLI)	Jascena Haslett Director
Preston County After School Explorers	Susie Huggins, MA Project Director
Project Hop2e in Taylor County	Bryan Smith Director
The Adventure Club, Taylor County	Bryan Smith Director
The Shack Neighborhood House	Tia Lasporgara MSW, LGSW Director
University of Pittsburg Medical Center (UMPC) Horizon	Dana Piatek, MSN, RN, CIC
Universal Electric Corporation, PA	Richard Graf, EHS &Facilities Manager
Warren County Health Coalition, VA	Shannon Urum, Vice President
WELL WVU Office of Wellness & Health Promotion	Shannon Foster PhD, Director
WV Bureau for Public Health Division of Health Promotion and Chronic Disease	Jessica Wright, RN, MPH, CHES, Director
WV Bureau for Public Health, Department of Health Statistics Center	Dan Christy, MPA, Director of Health Statistics, WV BPH
WV CARDIAC Program	Christa Ice Lilly, PhD, Assistant Director
WV Chapter, Alzheimer's Association	Amy Ernst, MSW, Education and Training Specialist
WV Department of Education	Rebecca King, MSN, MEd, CSN, RN, Coordinator, HIV Prevention Education
WV Health Science and Technology Academy (HSTA)	Sean Freedland, MS Curriculum Coordiantor
WV Healthy Start/Helping Appalachian Parents (HAPI)	Penny Womeldorff Project Director
WVU Center for Excellence in Disabilities	Lesley Cottrell, PhD Director
WVU Community Food Systems Lab	Megan Govindan, MPH, MS, RDN, LDN
WVU Division of Diversity, Equity, and Inclusion	Akeya Carter-Bozman, MSW Prevention Specialist
WVU Extension Safety & Health Extension	Mark Fullen, EdD, CSP, Director
WVU Extension Service, Obesity Prevention	Emily Murphy, PhD, Childhood Obesity Prevention Expert
WVU Extension, Family Services	Elaine Bowen, EdD, Professor and the Specialist for Health Promotion
WVU General Internal Medicine	Andrea Bailey, MSN, FNP-BC Lead Nurse Practitioner
WVU General Internal Medicine	Shanthi Manivannan, MD, PhD Section Chief
WVU Healthcare, Center for Quality Outcomes	Zachary Vance, MPH
WVU Heart and Vascular Institute	Ashley Jackson, BSN, RN Administrator
WVU Institute for Community and Rural Health	Brianna Sheppard, PhD, MA, Assistant Director
WVU Medicine Population Health	David Mayer, RN, BSN Lead Disease Management Coordinator
WVU Medicine Department of Family Medicine	Shaylee Peckens, MD, PCMH CCE NCQA PCMH Certified Content Expert -Medical

	Director for Quality and Performance Improvement
WVU Medicine OB/GYN ACE Project	Elly Myers, MPH
WVU Office of Health Services Research	Adam Baus, PhD Director
WVU Office of Health Services Research	Samantha Shawley-Brzoska, PhD, MPH
WVU Office of Sustainability	Traci Knabenshue Sustainability Director
WV WIC Association	Emma Walters, MS, RDN, LD, Nutrition Coordinator

2) Describe how the school engages external constituents in regular assessment of the content and currency of public health curricula and their relevance to current practice and future directions.

The School of Public Health holds biannual meetings with our Leadership Council. Meetings are held in the spring and fall of each year. When necessary, special committee meetings, ad hoc project meetings, or business sessions may be held prior to the beginning of the regular meeting.

In addition to the preceptor evaluations of the field experiences and MPH student practicums, the preceptors are also encouraged to attend the students' capstone presentations. Each semester, preceptors, alumni, and advisory board members are invited to attend the BSPH Capstone poster presentations. Preceptors, alumni and advisory board members are given the opportunity to evaluate the students' posters and engage the graduating BSPH students.

3) Describe how the school's external partners contribute to the ongoing operations of the school. At a minimum, this discussion should include community engagement in the following:

a) Development of the vision, mission, values, goals and evaluation measures

The school's current vision, mission, and values statements were created with extensive input from several stakeholders who we rely upon considerably to align strategic priorities of the 21st Public Health Workforce.(see strategic plan 2020 in section F1 of the ERF) The following list is by no means exhaustive but shows the breadth in our reach for ongoing interactions:

- SPH Community Advisory Board
- SPH Alumni Council
- WV Public Health Impact Taskforce (Founding Dean Greg Hand was a member in 2015)
- West Virginia Department of Health and Humans Resource (DHHR)
- The West Virginia Bureau of Public Health
- WVU Cooperative Extension
- West Virginia State Medical Association
- National Institute of Occupational Safety and Health
- West Virginia Medical Systems

Although some of the actual committees and entities listed above have changed or dissolved there is continued ongoing involvement with those who may be former members of these groups, have

new roles in the state, and new partners. Formal input is provided through interactions with the Leadership Council and Alumni Council. We have formal MOU's with the Kanawha Charleston and Monongahela County Health Departments. We work collaboratively with the National Institute of Occupational Safety and Health (NIOSH) through our Scholar in Residence Program. Our funded centers have an affiliation with an exhaustive list of local, state, and federal partners with oversight for population health in all fifty-five of WV's counties. In 2019, we worked collaboratively with the WVU Cancer Institute to create a joint appointment for a new hire responsible for community engagement for cancer prevention and education.

Constituent members and groups highlighted above are involved in faculty meetings (those with teaching assignments), survey queries about programmatic and curricula changes, and when appropriate have participated as part of search committees. Stakeholders and alumni are encouraged to attend the Dean's All Hands meetings to provide feedback when the topics are about progress and anticipated changes.

In 2019, as part of our strategic visioning, an extensive feedback loop for information in the development of strategic priorities, realigning goals with our purpose as a program and foci for the School was completed during a 6-month window.

Evidence for this process and ongoing communication with community partners can be found in section F1 of the ERF.

b) Development of the self-study document

There is no discreet timeline that distinguishes community engagement in the self-study document from a period where there was no involvement. The actual writing of components of the self-study was performed by a team with an external strategic planning expert but all of the data and narratives were informed by regular involvement with external and community partners who will remain engaged at the same critical level will after the site visit in April. In fact, at the time of this writing, plans are in place for more formal MOU's with constituent groups. The content in the self-study document represents three years of ongoing engagement with several formal practice partners and stakeholders which includes but is not limited to past and present members of the Leadership Council, Alumni Council, Mon County Health Department and Kanawha Charleston Health Department Staff, WV Health Systems, WVDHHR staff, NIOSH, and community members. Feedback on various sections of the self-study has been gathered over the course of revising competencies for MPH curriculum, development of competencies for the BSPH, the development of the plan to create an MHA (Board of Governors approval in November 2019), the Patient Navigator Program, changes to the practice-based experience, and development of the formal IPE with the AHEC Scholars.

An invitation to review a draft of the preliminary self-study was forwarded to several community partners and stakeholder groups. (Collective responses are located in section F1 of the ERF.) On Wednesday, December 17, 2019, we will host our Bi-Annual Leadership Council meeting. During this meeting, we will provide a formal presentation to highlight how we incorporated Council feedback in the self-study and other pertinent updates about the process.

c) Assessment of changing practice and research needs

Through a myriad of collaborative efforts with external partners the School is regularly informed of research and practice needs. Both formal and informal feedback from alumni, practice partners, and the public health workforce have inspired the addition of programs, changes in course content, the development of student-faculty research collaborations, and practice priorities. For example, feedback from the Health Department in Charleston concerning the needs of students to be trained in health related outcomes due to the Opioid crisis in our state, resulted in the 2017 appointment of Dr. Mike Brumage as the school's first Assistant Dean for Practice and Service. Dr. Brumage's appointment/position description was also inspired by *The Council on Linkages Between Academic and Public Health Practice (January 14, 2011)* in addition to the CEPH practice requirements. A request from the Deputy Director of NIOSH in 2018 resulted in the NIOSH Scholar in Residence appointment for one of our faculty in OEHS. Recently, through a long-term partnership funded by CISCO and the Silicon Valley Foundation it determined the WV Public Health workforce lacked some critical skills regarding the management of data and the utilization of common analytic and statistical software. This resulted in a collaborative effort between WVU's College of Business and Economics, and our Department of Health Policy, Management and Leadership to form a Graduate Certificate in Health Data Analytics.

d) Assessment of school graduates' ability to perform competencies in an employment setting

For the MPH and BSPH Programs our practicum preceptors and Practice-Based Learning Committee evaluate students ability to perform in an employment setting. Preceptors will evaluate the student based on the competencies that define the student's scope of work and cross-cutting skills. The final evaluation form will include the preceptor's evaluation of target competencies, work activities, products/deliverables and overall work performance of the student. Preceptors may provide comments on the student's strengths or needs for professional development.
The Practice-Based and Integrated Learning Committee will serve as the content experts in review of competency attainment and final products/deliverables. Both WVUSPH Preceptors and stakeholders who serve on our Practice Committee represent the employer base for the majority of our students.

4) Provide documentation (e.g., minutes, notes, committee reports, etc.) of external contribution in at least two of the areas noted in documentation request 3.

Appointment of Assistant Dean for Practice and Service
Appointment of NIOSH Scholar in Residence

Please see section F1 of the ERF

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

Strengths: WVU SPH has a longstanding and documentable history of the involvement of external partners as part of its overall mission, vision, and goals and a track record of community involvement in our programs' evaluation and assessment.

Weaknesses: None noted

Plans: n/a

F2. Student Involvement in Community and Professional Service

Community and professional service opportunities, in addition to those used to satisfy Criterion D4, are available to all students. Experiences should help students to gain an understanding of the contexts in which public health work is performed outside of an academic setting and the importance of learning and contributing to professional advancement in the field.

1) Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate.

Community service and professional development are pillars of our programs. Beginning at new student orientation for each program, orientation leaders set the tone that engagement in each of these areas is encouraged and expected. For our BSPH students, there is a 50-hour minimum community service requirement. Those hours are logged/tracked in a system called iServe (https://iserve.wvu.edu/), which is maintained by the WVU Office of Service and Learning. In addition to being able to track and log hours in iServe, the platform serves as a database for hundreds of current opportunities to engage in the community on any given date. Within the SPH, an Experiential Opportunities webpage was created (https://publichealth.hsc.wvu.edu/students/student-resources/experiential-opportunities/), and is maintained by, the Director of Public Health Practice & Service Learning. On Monday of each week, the WVU SPH Student ENEWS is distributed to all students via e-mail. The Student ENEWS serves as a digest of all things SPH. Included in that weekly newsletter is a section with the header “EVENTS AND OPPORTUNITIES”. In that section, students are informed of opportunities to engage on campus and in the community. The School also maintains e-mail listservs for each program for more targeted communication with students. Staff from the Office of Academic and Student Affairs often visit classes to promote upcoming events and many course instructors include slides in their class presentations to inform students of upcoming opportunities to engage.

Two additional resources that help introduce the importance of community engagement and professional development for SPH students are the Student Association of Public Health (SAPH) and the Delta Omega Honorary Society. Each organization has language about service/professional development embedded in its respective constitution/by-laws. These organizations hold regular leadership/membership meetings to keep constituents abreast of upcoming service/professional development opportunities. They maintain their own membership listservs for additional communication and have active social media profiles for information distribution.

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

PROFESSIONAL DEVELOPMENT ACTIVITIES

- Navigating the Post-Graduation Health Care Administrative Fellowship Seminar
- APHA – Mix & Mingle Social Networking Event - 2018
- Southern West Virginia Learning Journey Field Trip
- Meet the Injury Control Research Center (ICRC) Lunch & Learn
- Meet the Office of Health Services Research (OHSR) Lunch & Learn
- Meet the Prevention Research Center (PRC) Lunch & Learn
- Meet the Health Research Center (HRC) Lunch & Learn
- Lunch & Learn – Project ICE (Integrated Community Engagement) Collaborative
- Coffee & Conversation – A Guide to Civic Engagement
- Bystander Training – Partnered with Division of Diversity, Equity, and Inclusion
- SPH Alumni Panel – Career Pathways
- National Institute of Occupational Safety & Health (NIOSH) Tours
- Disease Detective Discussion – The Life of an Epidemiologist
- Dean's Colloquium Series – Securing the Safety Net Talk/Post Seminar Networking
- Injury Control Research Center Field Trip
- Delta Omega Alumni Grand Rounds
- Operation Dawson Storm – Disaster Preparedness Training
- Stop the Bleed Training at Monongalia County Health Department
- Biostatistics Monthly Seminar Series
- Monthly Student Association of Public Health membership meetings during the academic year –average attendance during the last 2 years is 35 students per meeting
- School/Departmental Support for Conference Travel
    - American Public Health Association (APHA), West Virginia Public Health Association (WVPHA), National Association of City and County Health Officials (NACCHO), International Society for Research on Identity (Naples, Italy),
- Capstone/Field Placement Poster Presentations (with invited community partners)
- Van Liere Research Conference
- Summer Undergraduate Research Experience (SURE)

SERVICE AND OUTREACH

- This is Public Health Roadshow – WVU Student Union
- Student Association of Public Health (SAPH) – 5K
- Delta Omega/Student Association of Public Health Habitat for Humanity Build
- SAPH Day of Service - Christian Help Food Pantry
- SAPH Lung Cancer Walk – Team Public Health
- Delta Omega Naloxone Kit Preparation and Distribution
- SAPH Monongalia County BOPARC Rail Trail Clean Up 2017
- Delta Omega Monongalia County BOPARC White Park Clean Up 2019
- SAPH Monongalia County Trunk or Treat (Bee Healthy Exhibit) – 2017, 2018
- Delta Omega Campus Blood Drive 2019
- Delta Omega Book Sorting with Read Aloud Program Volunteer Day
- Delta Omega/SAPH Supply Drive for The Shack Neighborhood House
- Food Drive Battle – Supporting The Rack (WVU Campus Food Pantry)
- Morgantown, WV NEDA Walk
- Delta Omega/SAPH American Red Cross Fire Safety Week – Home Fire Campaign
- WVU Public Health Brigades Service Trips – Honduras, Guatemala
- Preston County Healthy Grandfamilies Training

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

Strengths: Students have ample opportunity to engage in service/professional development events within the School, HSC, University, Morgantown community, state, nation, and on an international level.

Weakness: None noted

Plans: n/a

F3. Assessment of the Community's Professional Development Needs

The school periodically assesses the professional development needs of individuals currently serving public health functions in its self-defined priority community or communities.

1) Define the school's professional community or communities of interest and the rationale for this choice.

Our professional communities represent a variety of stakeholders and collaborative partners, which constitute the public health workforce. Additionally our community constituents and the indigenous rural populations benefit directly or as end-users of our programs. We assess the professional development needs of our defined communities in a variety of ways. Delivery of public health solutions in West Virginia are accomplished through a combination of governmental and non-governmental public health entities, health care, nonprofit, educational and volunteer organizations. As a land grant institution, our mission to advance education, healthcare and prosperity for all of West Virginia and beyond requires us to be flexible and inclusive when defining our professional communities of interest. The West Virginia Department of Health and Human Resources, Bureau of Public Health, WVU Medicine, The National Institute for Occupational Safety and Health (NIOSH), Area Health Education Centers and local health departments are a few members of our vast professional community. The rationale for our choice is also clearly documented in our mission.

2) Describe how the school periodically assesses the professional development needs of its priority community or communities, and provide summary results of these assessments. Describe how often assessment occurs.

Historically as a Department of Community Medicine and currently as a School of Public Health we have supported our mission through various centers and programs that have developed relationships with members of the workforce. We allow those centers, programs and individual faculty and staff to assess professional development needs in a manner best suited to the workface entities they engage. Assessments may occur formally or informally. Meetings and focus groups with our Leadership Council and or Alumni Advisory Council occur bi-annually.

Since 2014, the SPH has offered one certificate program targeting non-degree students: Applied Biostatistics. It is a 15-credit graduate level certificate program comprised of the already existing Applied Biostatistics series of courses (three 3-credit courses and one 1-credit course), the introductory epidemiology course (3 credits), and a capstone (2 credits). The certificate program is designed for those individuals who lack formal training in biostatistics and would like to gain skills needed to understand and apply standard statistical techniques. It is targeted for individuals at varying levels of their career (faculty, fellows, residents, or basic scientists) as well as public health practitioners in the state of West Virginia or beyond, who are interested in clinical and translational research. The program goal is to make students self-sufficient with their research, specifically on study design principles, data analysis, and interpretation of the results. The entire curriculum is available both **online and in-person (live),** thus providing greater flexibility and access to individuals from a variety of backgrounds, locations, and experiences.

Mid-Atlantic Public Health Training Center (MAPHTC)

The Mid-Atlantic Public Health Training Center (MAPHTC) was established in 2001 by the Health Resources and Services Administration (HRSA) to assist in the national goal to "improve the nation's current public health system by strengthening the technical, scientific, managerial and leadership

competence of the current and future workforce." The MAPHTC became the MAR-PHTC in 2014. The MAR-PHTC is part of the HRSA Public Health Training Center Network and represents Region III. The Public Health Training Centers (PHTCs) develop and deliver competency-based training programs to meet public health workers' core training needs. These training programs range from basic skills in public health science to leadership and systems-thinking skills. PHTC trainings are readily available. The PHTCs offer both in-person and online training opportunities. For the multiyear grant period of 2014-2018 WVU was one of the five Local Performance Sites for the Mid-Atlantic Regional Public Health Training Center. These needs were determined by the public health training grant and this is an example of how students were involved in the delivery of training to address the gaps

With new HRSA grant funding in August 2018, WVU is now listed as a Community-Based Training Partner. All WVU PHTC activities focus on work force development for community-partners (i.e., BPH, WVLHI, LHDs, etc.). Dr. Ranjita Misra, Director of the WVU PHTC, is considered a content area expert for MART-PHTC. Dr. Misra submits an annual impact report for these activities.

Master of Health Administration to prepare healthcare workforce

The Master of Health Administration was planned in response to feedback from the CEO of WVU Hospitals and WVU Health System Vice President of Strategic Initiatives WVU Medicine, and other health care administrators. The request was based on the need for physicians and other healthcare providers to be better trained in aspects of population health as a foundation for managing health care. This program will be a hybrid model to accommodate the schedules of residents and other practicing health care providers.

Additionally some of our Centers and Partnerships inform the School of professional development needs of our priority populations:

WV Department of Health and Human Resources –WVU School of Public Health partnership
The WVUDHHR focuses on three targeted DHHR areas of need including assistance with data analytics, program evaluation, and technical assistance/project management. Like other State-University Partnerships, the DHHR-WVU partnership has a strong emphasis in supporting the state Medicaid program (Bureau for Medical Services). Additionally, the DHHR-WVU partnership includes programmatic initiatives within the DHHR Cabinet Secretary's Office, the Bureau for Behavioral Health, and the Bureau for Public Health. In most instances these assessments are reviewed annually and/or through the life of a grant cycle.

Health Research Center

The Health Research Center supports state and local government, community-based groups, and the healthcare sector to improve public health in West Virginia through:

- Policy Analysis
- Program Evaluation
- Health Impact Assessment
- Survey Design and Implementation
- Interviews and Focus Groups
- Facilitating Community Health Meetings
- Community Health Needs Assessment
- Physical Activity, Built Environment, and Food System Intervention
- Technical Assistance around community and economic development

These activities, many of which are partnerships between the state Department of Health and Human Resources and the University, help strengthen our presence in the state of West Virginia and revolve around some of the most important current topics such as substance use disorders, health insurance access, and the impact of the health system on community health.

WVU Office of Health Services Research

The origin of the Office of Health Services Research, founded in 1975 within the WVU Department of Community Medicine, focused on applied health care data analysis to primary care clinics and hospitals, through funded efforts with state-based agencies and other state academic partners. The goal of these efforts was to better understand and address critical health care needs in our state, for the ultimate purpose of improved health outcomes over time. This original intent has been nurtured and developed over the past four decades, in concert with the ever-developing public health needs and priorities of our state.

Today, the vision of OHSR centers on helping primary care and community-based partners through hands-on, applied teaching and technical assistance to make better use of the data and technology that they have to inform practice, programs, and policy for improved quality of health indicators. Overall, OHSR aims to inform and empower health systems change designed to impact community wellness. This is a driver of our mission, which is to support quality improvement efforts that empower individuals who serve the underserved.

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Please see section F3 of the ERF to view supporting documentation.

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

The SPH enjoys a long and formal history of ongoing work and collaboration with the WVDHHR Divisions, Bureau for Public Health, Kanawha Charleston Health Department, Monongalia County Health Department, CDC NIOSH, WVU Hospital Systems, HSTA Program and others. This list is not exhaustive but captures the primary professional community that was involved in the development of the School of Public Health. There is a clear focus on train-the-trainer and service delivery for the populations with a rural designation. Our professional training programs are geared to positively influence the end user. End users are often dependent on the state for health care services and those who manage systems in response to federal or state mandates. We have a positive track record for delivery of programs designed to serve populations with disparate health outcomes associated with substance use, addiction, and disability. Stakeholders and collaborators reflect groups highlighted throughout this document and have requested services from our faculty and professional staff for a variety of critical public health workforce education, training, and skill needs. Formally, the School has been responsive to these needs as part of service contract requests, employer requests, community needs assessments, strategic planning activities, workforce needs surveys, alumni surveys and project management requests.

Strengths: Longstanding and ongoing partnerships with the workforce through many centers and programs.

Weaknesses: None noted

Plans:

- MHA program
- Additional certificate courses
- Opioid Conference in November organized by HPML Department

F4. 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 described in Criterion F3. Professional development offerings can be for-credit or not-for-credit and can be one-time or sustained offerings.

1) Describe the school's process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs identified in Criterion F3.

Delivery of Professional Development is "for-credit" for our MS in BIOS and Health Analytics Certificate Programs. Other professional development is delivered as needed or in response to an executed contract. The following activities are part of our professional delivery:

- Mid-Atlantic Public Health Training Center Activities (2017-present)
- WVUSPH Centers (see Section F3 in ERF for details)
- MS in BIOS Certificate Program
- West Virginia State Medical Association Presentation (CEU's)
- CISCO Digital Economy Initiative (Certificate Program)
- State-University Partnership w/DHHR
  - Data Analytics
    - Report on changes in Medicaid spending
    - Policy brief on return-on-investment for preventive dental coverage
  - Program Evaluation
    - Evaluation of Medicaid Diabetes Health Home Program
    - Evaluation of SUD 1115 Waiver
  - Technical Assistance/project management
    - Implementation of State Opioid Response grant provider education initiative
    - Strategic Planning support for West Virginia State Medical Association

2) 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).

Longstanding partnership with DHHR and the Schools role in evaluation.

2017 – Public Health Training Center conducted two webinars pertaining to health department accreditation. 67 local health department representatives attended.

2019 – West Virginia State Medical Association – Smoking Cessation presentation. Dr. Linda Alexander delivered a presentation to physicians and other caregivers in the state entitled “The Other Epidemic in West Virginia” to help providers include smoking cessation education as part of the patient-provider encounter. Approximately 300 in attendance.

Please see section F4 of the ERF for documentation.

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

Strengths: Through a variety of modes and mechanisms we assess, deliver, and evaluate professional development needs. We are able to respond in “real-time” and as part of strategic planning for our community partners.

Weaknesses: We have not historically gathered data as a routine part of delivery of services.

Plans: We will develop a template to help better “count” the number of individuals served as part of our professional development opportunities for the workforce.

G1. Diversity and Cultural Competence

Aspects of diversity may include age, country of birth, disability, ethnicity, gender, gender identity, language, national origin, race, historical under-representation, refugee status, religion, culture, sexual orientation, health status, community affiliation and socioeconomic status. This list is not intended to be exhaustive.

Cultural competence, in this criterion's context, refers to competencies for working with diverse individuals and communities in ways that are appropriate and responsive to relevant cultural factors. Requisite competencies include self-awareness, open-minded inquiry and assessment and the ability to recognize and adapt to cultural differences, especially as these differences may vary from the school's dominant culture. Reflecting on the public health context, recognizing that cultural differences affect all aspects of health and health systems, cultural competence refers to the competencies for recognizing and adapting to cultural differences and being conscious of these differences in the school's scholarship and/or community engagement.

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.

Priority Underrepresented Populations representing Students, Faculty and Staff

- Rural Populations
- First Generation Students
- Racial and Ethnic Minorities
- LQBTQ
- Veterans

West Virginia University School of Public Health is the states only CEPH-accredited school, the first new school at WVU in 50 years, and tied to the University's status as a land-grant mission of service. Of the 13 states that make up the Appalachian Region, West Virginia is the only state where all 55 counties are classified as Appalachian. Additionally, according to the Office of Rural Health Policy, 34 of the 55 counties in West Virginia were considered rural in the 2010 census. Social determinants of health, unemployment rates, and overall health outcomes for the state, dictated our priority population focus on rural, first generation students https://carruth.wvu.edu/resources/self-help/first-generation-college-students racial and ethnic minorities, LGBTQ populations, and Veterans https://www.ruralhealthinfo.org/states/west-virginia, Moreover, it is also important to note that the University has extensive systems in place to prioritize resources, support and an infrastructure that caters to these groups. Geographic location is a primary factor in determining risk for morbidity and mortality, access to health care, and exposure to toxic environments. The School was formed in response to the well-documented needs of each of these populations and the varied ways in which culture, social status, education, limited resources, discrimination, bias in health care due to institutional racism and its impact on health equity and inclusion.

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.

Overarching Goals from WVU Strategic Plan 2020:

- *Goal 1: Objective 1.2: Prepare students to confront the public health challenges of the 21st century*
- *Goal 1: Objective 1.3: Strengthen the public health workforce of West Virginia*
- *Goal 2: Objective 2.2: Expand our research portfolio to produce new knowledge about determinants of disease and injury, causes of health disparities, and effective interventions for prevention and treatment*
- *Goal 4: Objective 4.1: Recruit and retain a high quality and diverse workforce*
- *Goal 4 Objective 4.5: Maintain an open and inclusive governance structure that includes faculty students, staff, and faculty*

Specific Diversity, Inclusion and Equity Goals

- Recruit and retain underrepresented minority faculty and students
- Create an inclusive environment for LQBTQ and/or minority students, faculty, and staff
- Create an infrastructure to support Zero Tolerance for Discrimination and Harassment
- Incorporate a social justice framework in curriculum and instruction

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.

- Consultation and training with the Division of Diversity, Equity and Inclusion 2016, 2017, 2018, 2019
- Training from the Office of Veterans Affairs 2016-ongoing
- Commissioned Diversity Report from Diversity Committee in 2018
- Diversity Week SPH focus 2017, 2018, 2019
- Harvard Implicit Bias Project Training and Title IX Training in 2017, 2018
- WVU Talent and Culture Training on Diversity and Cultural Competence 2018
- Developed diversity, recruitment, and retention plans 2018-ongoing
- Participated in the development and subsequent Editorial Board for the Journal of Appalachian Health (2017-ongoing)
- Leadership on the Executive Committee for the Development of the ASPPH Zero Tolerance for Discrimination and Harassment 2018-2019
- Creation of the WVUSPH Diversity and Inclusion Task Force 2019
- Institutional Member of HSC-Diversity and Inclusion Committee

The Office of Talent and Culture is the University's hub for human resources, training and development. This office has provided several useful resources employed by our school to foster diversity, equity, and inclusion among our faculty, staff, and students. The WVU Human Resources Program no longer supports a formal Social Justice Representative for department level participating in hiring and searches, however, the school has continued to provide a trained social justice representative on all of our hiring and search committees. Additionally this office conducts regular training to all with supervisory responsibility in the areas of culture, diversity and inclusion

https://talentandculture.wvu.edu/lod/supervisor-development. The Chief of Staff and Senior Associate Dean for Administration ensure that staff and faculty benefit from leader training in diversity and culture and university-wide resources to support efforts in these areas through the WVU Employee Handbook and the Faculty Handbook.

The Director of Admissions, Director of Career Development and Student Success, Student Affairs Staff, Program Directors, and the Director of Assessment have access to a university-wide infrastructure that supports all policies and procedures with diverse recruitment, retention, and student experience. These resources are in the Office of Graduate Life, the Office of Undergraduate Affairs, the Graduate Recruitment Office, and the Division of Equity, Diversity and Inclusion (DEI). In addition, this year's focus on graduate recruitment is centered on diversity with specific goals to recruit more minority students. The Office of Graduate Recruitment has a memorandum of agreement with Florida A&M University to participate in their Graduate Feeder Scholar's Program and representatives from WVU attend their Recruitment Fair each year in early September. WVU representatives attend SACNAS each year. This group focuses on the success of Chicanos/Hispanics and Native Americans in attaining advanced degrees in STEM fields. Also each year, WVU representatives that attend ABCRMS, which is the Annual Biomedical Research Conference for Minority Students. All three of these recruitment events are focused on minority recruitment. Additionally, each year, the Office of Graduate Admissions and Recruitment partners with the WVU Office of Diversity, Equity and Inclusion to host our WVU Colloquium. This event is for under-represented minority students interested in doctoral study at WVU. It is a three-day event where we have guest speakers to share information on the doctoral education experience here, as well as have the attendees spend time with their individual programs of interest. Those who attend this event are considered for the Chancellor's Scholars program, which is housed in the Office of Diversity, Equity and Inclusion. Lauren Devine, as our Director of Admissions, attends weekly meetings centered on the activities described above. One of our currently enrolled MPH students came to us via the WVU Colloquium Program.

The Advising Coordinator for the Masters and Doctoral Programs, Program Directors, Academic Dean, and faculty have consistent and regular information via targeted email messages, various online news communication venues, and electronic communication stations conspicuously posted around faculty and student offices and the Office of Academic Affairs regarding diversity, inclusion and equity events. The Advising Coordinator attends regular meetings with the Office of Veterans Affairs http://catalog.wvu.edu/undergraduate/veterans/#Center to both ensure compliance with educational requirements and that the program is meeting the needs of our active veteran students who have often been deployed during their schooled coursework. We also have a rich collaborative relationship with the Director, Center for Excellence in Disabilities http://www.cedwvu.org/ who also retains adjunct faculty status in the Department of Social and Behavioral Sciences.

In the last three years, student interest in our program has been based on a desire to work with scholars in the area of rural and/or Appalachian health, health disparities, opioid, tobacco and other substance use, and groups typically underrepresented in and by the health care system. WVU has the nation's leading scholar in Veteran Suicide, a formal relationship with NIOSH for those who are interested in workplace injury, including those who are disparate populations, five (5) Centers with a rural health focus, each actively supporting student research since 2017, and a community-engaged and practice-based faculty. Decisions regarding our priority populations have been made in response to the stated needs for the school to train the next generation of the public health workforce with the knowledge and skills that will benefit underrepresented groups.

Although our student body represents populations from around the US and abroad, almost all of our staff are from West Virginia. This is an indicator of the importance of having a priority focus that

represents the indigenous community and populations. There is a very strong and resilient Appalachian culture alive and well at WVU and many are proud to work for one of the state's largest employers. Many of the administrative staff hired prior to the creation of the SPH have remained with the exception of those left the school to take advantage of retirement benefits. This may be indicative of the compensation and benefits that the School affords different from other employers in the state. Several faculty were part of a cluster-hire and have remained with the school over the last seven years. The University as a whole prioritized culture, climate, service and respect as part of its institutional vision and the school has likely benefitted from this in many ways that reflect an inclusive and welcoming environment. However, in the last three years we have actively recruited faculty and staff by advertising in Diversity Job postings, including interview questions regarding experience with and responsibility for working with diverse populations, and asking a member of the DEI staff to participate during candidate interviews.

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.

WVU students are exposed to a variety of topics centered on diverse populations, equity, inclusion, and social justice through the well-advertised schedule of events highlighting these topics, active encouragement to attend published events, incentivized participation in diversity activities through course credit or extra points. Guest lecturers are arranged through faculty's work with underrepresented groups or agencies that cater to such groups and are delivered via SKYPE for those with positions that limit travel and through organized venues such as the Dean's Colloquium Series** For topics see section G1 of the ERF. Students are actively involved in the WV Global Health Brigade, which sponsors a yearly mission trip abroad, work with Center Directors with project topics that range from opioid use and abuse to brain injury among veterans. Students have participated in Learning Journeys, Practice-Based Experiences, Internships, and with alumni across the state to foster a keen awareness of the needs of the Appalachian region. Students have also participated in research focused on the Appalachian culture and health needs through ongoing work with faculty, and exposed through coursework to the applied practice of intervention, evaluation, community needs assessment, and policy development for rural and underserved groups.

- Weekly advertised events tied to diversity, equity, inclusion, and cultural competence
- Required course content linked to culture, social justice, equity, and underrepresented populations in health care access and treatment (PUBH 620: Building and Sustaining Public Health Capacity)
- Standardized questions on yearly performance evaluations
- Expert on Appalachian Health at new student orientation 2016, 2017
- Vice President of Diversion of Diversity, Equity and Inclusion delivers commencement speech to Public Health Graduates in 2018
- Workshops on Implicit Bias
- Title IX Training
- Human Resource Training on Cultural Competence in the Workplace
- Partnerships with organizations that serve diverse constituent groups

- Director of Diversity and Community Engagement Speaker at mandatory new student orientation 2019

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.

The WVU Division of Diversity, Equity, and Inclusion https://diversity.wvu.edu/ has an extremely well-articulated vision, outstanding resources, and is one of the most comprehensive centers of its kind housing both the Title !X Office and the Equal Opportunity Office. Due to the extensive nature of our relationship with former Vice President David Fryson, current Vice President Meesha Poore, and the newly hired Center Director, J. Spencer Darden, the school has benefitted from external resources that support our efforts to recruit, retain, and provide a welcoming and inclusive environment for our priority populations. Additionally the community-engaged scholarship of our faculty coupled with the strategic placement of students in roles that ensure exposure to and skill development in working with priority populations has been successful. The School had an active Diversity Committee from 2015 to 2018. In 2017-18, Dean Coben asked that the Diversity Committee spend time reexamining its role to better align its activities, purpose, and goal setting with the goals of the program and to develop a blueprint for sustainability and measureable goals (see corresponded in section G1 of the ERF). The commissioned report, Full Diversity & Inclusion Report June 28, 2018, (in section G1 of the ERF) identified the following recommendations:

Minimum Set of Recommendations Undertaken with Nominal Information and Financial Assistance.

1. To explore recent episodes within the School from the last 12 months and acquire baseline data engage a reputable, external diversity specialist to collect and assess qualitative data on inclusion and the social emotional climate at the School of Public Health.

2. Appoint a high-level position to oversee DEI within the SPH charged with studying and recommending a structure and resources to address diversity and inclusion. The position may be a director or assistant dean. **See second set of recommendations for a position with greater responsibility that will –by comparison- study, structure and implement a school level DEI system.

3. Initiation by the Dean's Office, in collaboration with the Diversity and Inclusion committee, an intentional effort to gain greater clarity on and closer ties with the University level diversity, equity, inclusion (DEI) system.

4. Formulate the SPH Diversity and Inclusion (DI) Committee to have consistent interaction with and representation from the following groups: the University DEI system including the ADVANCE program; and SPH staff and students.

5. Review a range of definitions for diversity within systems of higher education and reformulate the School's definition to ensure that it is at least as expansive as the University definition.

6. Establish a basic set of internal mechanisms for monitoring and measuring DEI within the School including: elevation of the Diversity and Inclusion Committee from ad hoc to standing in the Faculty

Bylaws; an annual conversation with the curriculum committee; an ongoing assessment of the faculty, staff and student diversity climate, hiring, recruitment and retention; and consultation on the criteria and selection of students for the Dean's Scholarship.

Ideal Set of Recommendations Undertaken with Informed Knowledge and Financial Resources. The ideal set of recommendations includes all the minimal suggestions outlined above plus the list below.

7. To address recent issues within the School from the last 12 months and acquire baseline data engage an external specialist to collect and assess qualitative data on inclusion and the social emotional climate at the School of Public Health.

8. **Appoint an Assistant Dean for Diversity, Equity, and Inclusion (DEI) within the SPH to undertake and coordinate a concentrated effort and scope of work to study, structure and implement a system and resources to address diversity and inclusion.

9. Engage an external specialist in DEI to help the School of Public Health leadership and Diversity and Inclusion (DI) committee comprehend and identify the range of options for evidence based models, best practices, policies, and metrics in DEI for higher education.

10. Retain the external DEI specialist to undertake an assessment of the School's DEI structure, programming, regulations, and performance.

11. Recommend that the Health Sciences Center (HSC) support and institutionalize a commitment to DEI by establishing a position for a chief diversity officer and related infrastructure, i.e., a budget and implementation resources; a DEI committee with representatives from each School in the HSC; a regular assessment process; and evidence-based policies, regulations, and programming.

These recommendations were shared with the Senior Associate Deans, Department Chairs, Program Directors, and with Academic and Student Affairs Staff. Between July 2018 and August 2019, the school took the following actions based on the recommendations:

- Examined responses in the HSC Culture and Climate Survey related to Diversity, Equity and Inclusion (recommendation #1)
- Conducted Exit interviews with faculty of color (recommendation #1)
- Consulted with and requested assistance from the Vice President of the Division of Equity, Diversity and Inclusion (recommendations #3, #4, #9)
- Consulted with Dr. Melissa Latimer, WVU ADVANCE (recommendation #4)
- Examined recruitment and retention policies and hired recruitment specialist (recommendation #6)
- WVUSPH joined the HSC's Diversity and Inclusion Committee as one of 5 schools in HSC (recommendations #4, #11)
- On-going and regular interaction with the Director of Diversity and Community Engagement (recommendations #3, #4)
- Adopt the definitions of Diversity, Equity, and Inclusion and guiding statements from the Division of Diversity, Equity and Inclusion (recommendation #5)
- Appointment to the ASPPH Diversity and Inclusion Section (at the request of Dr. Laura Magna and supported by Dean Coben (recommendations #2, #9)

The delivery of the June 28, 2018 Diversity and Equity Report by Dr. Andress coincided with two significant events. Also in June, the ASPPH's Diversity and Inclusion Section and Executive Committee Task Force on Diversity and Inclusion focused on developing policies that support zero tolerance for harassment and discrimination. Further, during a similar period, Vice President Clay Marsh launched efforts to enhance an institutional culture that better supports a diversity and inclusion infrastructure piloted through a targeted program at the Health Sciences Center. Dr. Linda Alexander was asked to lead efforts in response to the Diversity and Inclusion Report and to represent the Health Sciences Center efforts because of her nationally recognized expertise in this area and her ongoing role with ASPPH.

The Diversity and Inclusion Task Force was created to:

- Examine the recommendations from the 2018 Diversity and Inclusion Report and develop measure goals to support these recommendations where appropriate
- Align WVUSPH goals with those for all health professions programs in Health Sciences
- Evaluate all of the WVUSPH systems that support learning, inclusive excellence, recruitment, retention, practice, and human resources to better understand gaps in teaching, service delivery, culture, climate, hiring practices, and scholarship.
- Develop a set of expectations and measureable goals around inclusive excellence and cultural competence for faculty, staff, and students.

The WVUSPH Diversity and Inclusion Task Force has only recently begun to collect data external to what is gathered annually as a part of University-wide culture and climate survey's and measures on yearly performance evaluations. Data collection will be tied to the goals and objectives highlighted in this section and those described in more detail in the Diversity and Task Force charter document (see section G1 in the ERF).

In addition to the aforementioned a breakdown of financial resources devoted to Diversity and Cultural Competence since 2017 is listed below:

Disparities in FDA's Response to Tobacco Use Among Minority Populations
FDA Regulatory Science Meeting – WVU School of Public Health
July 2018
Total Spending $6,855.05

Position Advertisement in Diversity Job Boards – beyond normal recruitment efforts by the University
Total Spending $939.00
Inside Higher Ed: $349.00
Higher Ed Jobs: $315.00
Academic Careers Online: $275.00

Diversity, Equity, and Inclusion Speaker – for WVU Diversity Week 2019
Dr. Gilbert Singletary
Total Spending $1,981.53

Minority Faculty Recruitment:
Lewis-Thames Visit (2)

Total $2,169.74

Williams Visit (2)
Total $1,232.61

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

Since 2016, West Virginia University has implemented a climate survey to all faculty and staff. In the 2018 survey, the SPH had a 52 % response rate. On average, the SPH ratings were higher than the overall University. Most notably in the areas of consciousness of student services, respect for delivery, and a sense of pride. Please see an image of the results in section G1 of the ERF.

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

Strengths in this area include the University-wide and ongoing historical and contemporary significance of the value of diversity, equity, inclusion and social justice (see Darden PPT in section G1 of the ERF). The Diversity Task Force is designed to action real-time solutions to undesirable outcomes in this area and design a blueprint for change. This blueprint is intended to supplant efforts to have diversity and inclusion become something "one-off" from the regular, day-to-day, and systematic function of a School of Public Health.

Like many of our peer institutions we are anticipating traction with a more "universal" culture and climate survey that align with strategic priorities for diversity and inclusion. This effort is being led by the ASPPH Diversity and Inclusion Section (chair, Dr. Linda A. Alexander), the Diversity and Inclusion Advisory Committee (chair, Dr. Diane Marie Saint George), and the Zero Tolerance Task Force Executive Committee (chair, Dr. Perry Halkitis).

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 school's academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering.

UNDERGRADUATE

West Virginia University has common requirements for advising of all undergraduate students across the University. These include plans of study, required advising every fall and spring semester with holds on registration for all students (new freshmen, University students, external transfers, and second degree) until students have met with their advisor to discuss course registration for the upcoming semesters.

Academic Advising is a core value of the School of Public Health at West Virginia University. Students are required to meet with their assigned advisor at least once each semester. Advising services include both fall and spring semester advising for all Public Health majors, including those with dual degrees and other specific needs, including students with veteran's benefits, scholarships, honors students, student athletes, and students in academic or financial distress. Students have complete access to the advisor throughout the year, are encouraged to stop by during business hours or set up arranged appointments, and can contact the advisor through email 7 days a week. New freshmen have a proposed Plan of Study developed during their first semester in the program; they register for a set of recommended courses their first semester. Transfer (internal and external) students work with the advisor to develop a Plan of Study upon acceptance into the program and prior to registering for any courses. All Plans of Study are updated at semester advising appointments, and students are provided with a copy. In addition, DegreeWorks lists all program requirements and documents the completion of these as students progress through the program.

The advisor completes 90-hour degree checks for students when they reach their senior year. Advisors also performs the review of graduation applications and is the primary contact for reviews ensuring all degree requirements have been met.

Throughout the academic year the advisor provides assistance at the academic session of WVU's Welcome Week, completes financial aid audits, attends academic advising council meetings and workshops, completes student-athlete audits, posts electronic special permission in the Banner system, assists with graduation ceremonies in the spring term, provides academic advice during new student orientation in the month of June and teaches Public Health 191 a freshman year seminar course in the fall.

Graduate (MPH/MS)

The MPH and MS Academic Program Advisor provides support, knowledge and guidance throughout the student's academic program. The Program Advisor helps with the development of individualized Plans of Study through WVU DegreeWorks, helps to address student problems or concerns related to the plan of study, answers questions about related courses and electives, and serves as liaison with

the student- identified faculty mentor. MPH and MS students are required to meet with the Program Advisor to complete the individualized Plan of Study during their first semester and to identify their choice of faculty mentorship. The Plan of Study serves as a formal agreement between the student, School of Public Health and the HSC Office of Graduate Programs and consists of the conditions the student must meet in order to earn the desired degree. This plan is approved by the student, Program Advisor, MPH or MS Director, SPH Sr. Associate Dean, Academic Affairs, and the Assistant VP HSC Office of Graduate Programs. MPH and MS students are required to meet with the Program Advisor each semester to review progress prior to enrollment for the next semester courses and to complete an annual student evaluation. The MPH and MS Program Advisor will guide each student through the process of applying for graduation and confirm the student's eligibility for the MPH or MS degree.

Graduate (PhD)

The PhD departmental advisors are the main point of contact for PhD students in their first and second year. The primary responsibility of the departmental advisors is to help students select courses appropriate for their chosen degree and to provide early mentorship until a research mentor (dissertation committee chair) is chosen. In the first semester, departmental advisors and students meet to complete the major-specific Plan of Study Worksheet, outlining the courses to be taken for the degree. This Plan of Study Worksheet will serve as the foundation for the actual Plan of Study that is due upon dissertation committee formation and approval. PhD students are recommended to meet with their departmental advisor each semester to ensure progress towards degree completion

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

Undergraduate

The School of Public Health advertised for the position of Advisor and once selected by the Search Committee, Scott Mahaney was hired as the SPH Developmental Advising Specialist to advise all undergraduate students. This choice was made due to his decades-long experience in advising at other institutions and his knowledge of the software and processes implemented for advising. Scott completed WVU Employee Orientation and then was trained by the Assistant Dean of Undergraduate Studies; Scott continues to closely with her on all advising issues and processes.

The WVU Advising Council, https://academicadvising.wvu.edu/, sponsors four development sessions or workshops per semester to enhance the skills of academic advisors. Training is also provided by other University officials on software systems and updates that advisors implement as part of the advising process. These include: Banner, STAR Banner, Degreeworks, Schedule Builder, Navigate, Argos and Banner Workflow.

Graduate (MPH/MS)

The SPH Senior Program Coordinator has absorbed the role of MPH and MS Program Advisor. This position within the SPH is/has been responsible for course scheduling (UG, GR), maintaining student records, counseling students on requirements and academic policies and procedures, providing plan of study and DegreeWorks course audits, as well as graduation certifications. The Sr. Program Coordinator/Advisor within the SPH was already oriented to the roles and responsibilities for advising and continues to work with each SPH Program Director (MPH, MS and PhD) in the development of student handbooks and associated curriculum. The WVU Office of the President, and the Associate Provost for Graduate Academic Affairs, Office of Graduate Education and Life, provide monthly and yearly advising workshops for all graduate program advisors and directors to educate and update on best-practice advising methods.

Graduate (PhD)

PhD Advisors are assigned in each department by the Faculty Chair. The Faculty Chairs from the Department of Occupational and Environmental Health and the Department of Social and Behavioral Sciences have elected themselves as the departmental advisor. The Faculty Chair from the Department of Epidemiology has elected a senior faculty member as their departmental advisor. Each advisor from each department is oriented to their curriculum per regularly scheduled departmental meetings, roles and responsibilities of the advisors are discussed each year with the PhD Director, and advisors are provided the SPH PhD Student Handbook that highlights program and major requirements, academic and administrative polices, student resources, and the various PhD forms needed once their dissertation committee had been formed.

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

Please see H1.3 in the electronic resource file to view advising materials and resources.

4) Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rates, if applicable.

Undergraduate

Please see H1.4 in the electronic resource file for evaluation results.

Graduate (MPH/MS/PhD)

The SPH graduate students (MPH, MS, PhD) wished for more anonymity when completing the Graduate Student Satisfaction Survey, so it was agreed upon that the WVU Health Science Center would administer the satisfaction surveys, beginning in 2018. Response rates for 2019 were 73.33 and in 2018 were 58.06%. In 2017, the School of Public Health administered the Graduate Student Satisfaction Survey. The survey was department specific, as students were assigned advisors within their departments.

The 2019 survey asked MPH and MS students to rate the following statements:

- I receive ongoing, constructive feedback on my progress toward my degree from my major advisor.
- My advisor treats me with respect.
- My advisor replies to my emails in a timely fashion.
- My advisor is accessible.

2019 (MPH/MS)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0%	0%	9.09%	27.27%	54.55%
My advisor treats me with respect.	0%	0%	0%	36.36%	63.64%

My advisor replies to my emails in a timely manner	0%	0%	9.09%	36.36%	63.64%
My advisor is accessible	0%	0%	9.09%	36.36%	54.55%

The 2019 survey asked PhD students to rate the following statements:

- I receive ongoing, constructive feedback on my progress toward my degree from my major advisor.
- I would feel comfortable talking to my advisor about career opportunities outside of academia.
- My advisor treats me with respect.
- My advisor replies to my emails in a timely fashion.
- My advisor is accessible.

2019 (PhD)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0%	25%	0%	0%	75%
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0%	0%	25%	0%	75%
My advisor treats me with respect.	0%	0%	0%	0%	100%
My advisor replies to my emails in a timely manner	0%	25%	0%	0%	75%
My advisor is accessible	0%	25%	0%	0%	75%

2018 (MPH and MS)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0%	33.33%	5.56%	50%	11.11%

2018 (PhD)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0%	23.8%	7.69%	38.46%	30.77%
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0%	0%	7.69%	38.46%	53.85%

2017 – Biostatistics (MPH)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0	0	0	2	2	0	4.50
2017 – Biostatistics (MS)	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**	**Agree**	**Strongly Agree**	**NA**	**Rating Average**
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0	0	0	1	1	0	5.0
I would feel comfortable talking to my advisor about career opportunities outside of academia	0	0	0	0	1	0	5.0

2017 – Epidemiology (MPH)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	3	1	2	1	0	0	2.14
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0	2	0	5	0	0	3.43
2017 – Epidemiology (PhD)	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**	**Agree**	**Strongly Agree**	**NA**	**Rating Average**
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0	1	1	1	2	0	3.80
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0	1	1	1	2	0	3.80

2017 – Health Policy (MPH)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0	0	2	2	1	0	3.80

2017 – Occupational and Environmental Health (MPH)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	0	0	1	1	0	0	3.50
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0	0	0	1	1	0	4.50
2017 – Occupational and Environmental Health (PhD)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	1	1	2	0	1	1	2.80
I would feel comfortable talking to my advisor about career opportunities outside of academia.	0	0	3	0	2	1	3.80

2017 – Social and Behavioral Science (MPH)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	1	0	1	5	1	0	3.63

2017 –Social and Behavioral Science (PhD)	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	NA	Rating Average
I receive ongoing, constructive feedback on my progress toward my degree from my major advisor	1	0	0	0	1	1	3.0
I would feel comfortable talking to my advisor about career opportunities outside of academia.	1	0	0	0	1	1	3.0

5) Describe the orientation processes. If these differ by degree and/or concentration, provide a brief overview of each.

Undergraduate

West Virginia University conducts three different types of New Student Orientation (https://orientation.wvu.edu/) for new students and their families:

- During the month of June and a make-up day in August for all First-time freshmen,
- During the month of August for all new international students, and
- During the month of August for all new external transfer students.

All New Student Orientations are coordinated and implemented by the WVU Office of Undergraduate Admissions (https://admissions.wvu.edu/). After being welcomed to the University by President Dr. E. Gordon Gee, students and their parents are exposed to information about WVU, being a college student, and WVU resources. Students and parents attend an Academic Session with the School of Public Health team in the morning to learn about the Public Health degree program and its requirements. After lunch parents meet with the WVU Dean of Students and the students return to the SPH team for advising and scheduling their first semester of classes. During this advising session, the start of a Plan of Study is developed and students complete their registration using Schedule Builder. The new student orientation agenda can be viewed in section H1.5 of the ERF.

The Public Health Information Session covers (see PowerPoint in Document file):

- Accreditation
- Degree programs offered by the School of Public Health
- Program requirements for the undergraduate degree.
- GPA policy
- AP credits
- general education foundation requirements
- Academic expectations
- The 3 concentrations or areas of emphasis
- Miners, and electives.
- The capstone course and poster presentation
- Advising tools
- SPH career services

- SPH school activities.

We also meet with all new students in the major (FTF, external transfers) during the Academic Session convened during Welcome Week (https://welcomeweek.wvu.edu/), the day before classes start. The Dean and Senior Associate Dean for Student and Academic Affairs welcome the students, critical program and WVU information is reviewed, and we conduct getting to know you and team building exercises.

Graduate (MPH, MS, PhD)

An important component of student advising occurs during fall orientation. All graduate students (MPH, MS, PhD) are oriented to the SPH Mission, Vision and Values from the SPH Dean and the Sr. Associate Dean for Student and Academic Affairs. Students are introduced to the SPH Office of Students Services' Team and provided with student handbooks that outline program curriculum, advising process, WVU/SPH relevant policies and procedures, as well as WVU/SPH student resources. Students are also introduced to various WVU entities that participate as scheduled: WVU Academic Integrity, Office of Student Conduct; WVU Division of Diversity, Equity and Inclusion; WELLWVU; and WVU Financial Aid Office, to name a few. Faculty mentors play an important role in sharing their career experience and knowledge, providing student encouragement, are sources of information and opportunities, in addition to serving as academic role models. Students are provided a packet of information that includes a list of SPH Faculty with their research interests. The MPH/MS student will identify a faculty mentor(s) from this list during their first advising session to help guide and direct the student throughout their program. The PhD student will identify their faculty mentor after year 2 of their PhD program and completion of coursework required. Information on WVU/HSC campus resources and Morgantown/Monongalia County resources are also included in the packet for students.

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

Undergraduate

Strengths: All new students are oriented to the University, the School of Public Health, and the Public Health major. Advising is a core value: students are advised and their Plan of Study updated every semester. Students have access to the Academic Advisor, their instructors and the Assistant Dean of Undergraduate Studies.

Weaknesses: None

This criterion is fully met.

Graduate (MPH/MS)

The SPH MPH and MS Academic Advising services have strengthened due to the multiple levels of student advisement and mentoring. A central MPH/MS Academic Program Advisor has allowed for consistency and continuity within each program and the WVU/SPH processes are more aligned to follow. A central MPH/MS advisor has allowed the SPH faculty to serve more in mentorships roles that provide students the opportunity to learn first-hand from faculty experience and who can serve as employers to graduate student "apprentices". Consistent academic program advising, appropriate

faculty mentorship, in addition to career counseling, will serve as influential factors with degree completion.

Weakness: None

This criterion is fully met.

Graduate (PhD)

The advising experience by PhD students in the SPH has been under review and approval by the latest PhD Program Director. Three specific steps to improvement have been taken:

1. The Program Director regularly meets the students for an external overall mentoring and to facilitate a collaborative feel in the group of PhD students. The Director meets with each student individually once per year at minimum, and twice per year for freshmen students. These meetings are meant to generate a sense of senior support to the students as well as to work on more specific components such as the Individual Development Plan (IDP). Each semester the PhD Director also runs lunch meetings (luncheons) exclusive to PhD students that have been well attended.
2. The Departmental level advisor positions explained above have been formalized to a greater extent than before which has resulted in significant improvement in student advising experiences. Students are instructed to consult with the departmental advisors about Plans of Study, course selection, potential course waivers, and any other issues they may have, which has given them a direct link to their department. The PhD Program Director is in active communication with the advisors and serves to support them in their roles.
3. The revised PhD Program, discussed in section D18, point #10, (that will come to effect in the fall of 2020), will include an ad-hoc and school-wide advising committee. This committee will primarily serve to oversee the advising experience for all PhD students in the SPH, and support decisions regarding course waivers, the matching of individual students with dissertation advisors, and confront specific case issues.

Weakness: None

This Criterion is fully met.

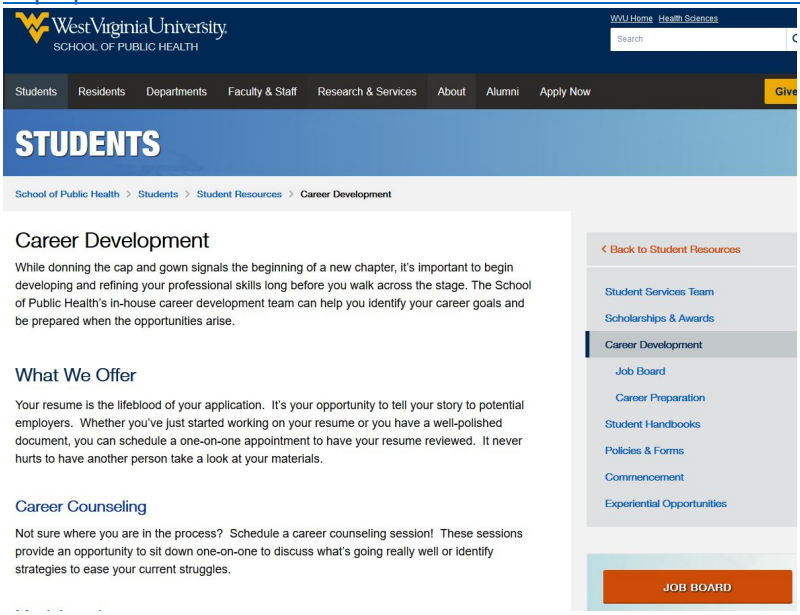
H2. Career Advising

The school provides accessible and supportive career advising services for students. Each student, including those who may be currently employed, has access to qualified faculty and/or staff who are actively engaged, knowledgeable about the workforce and sensitive to his or her professional development needs and can provide appropriate career placement advice. 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.

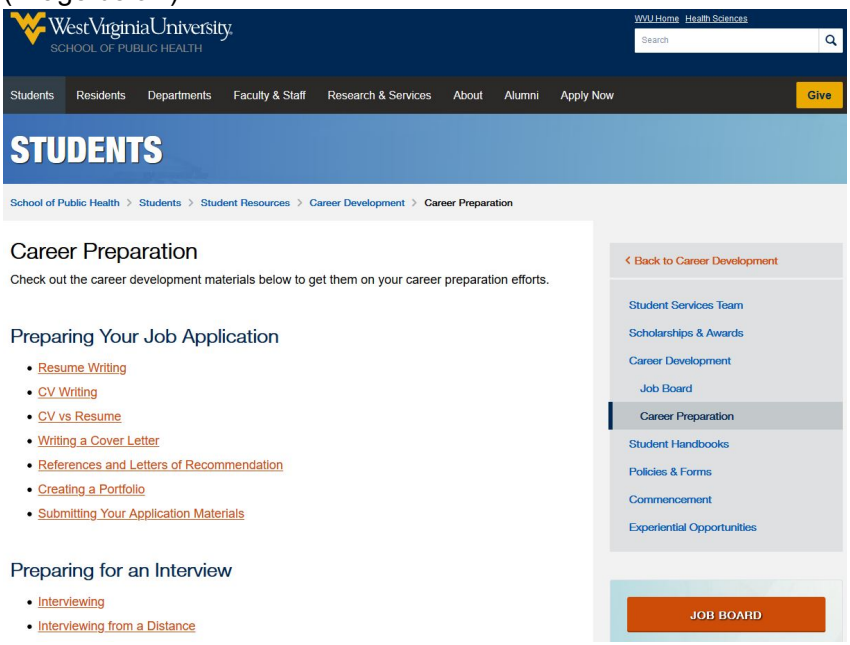
The school provides such resources for both currently enrolled students and alumni. The school may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alumni available for networking and advice, etc.

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.

In spring 2017, the School created a new Director of Career Development & Student Success position. The position was filled in late June 2017. The new director was tasked with creating career development content for students across each of the schools programs and the services were to be accessible by all WVU SPH students and alumni. Current general services available to all students and alumni include: one-on-one coaching, mock interviews, resume development/review, cover letter development/review, business card creation, and job search strategies. The director also created and maintains a public health specific career section on the School's website, http://publichealth.wvu.edu/students/student-resources/career-development/ (image below).

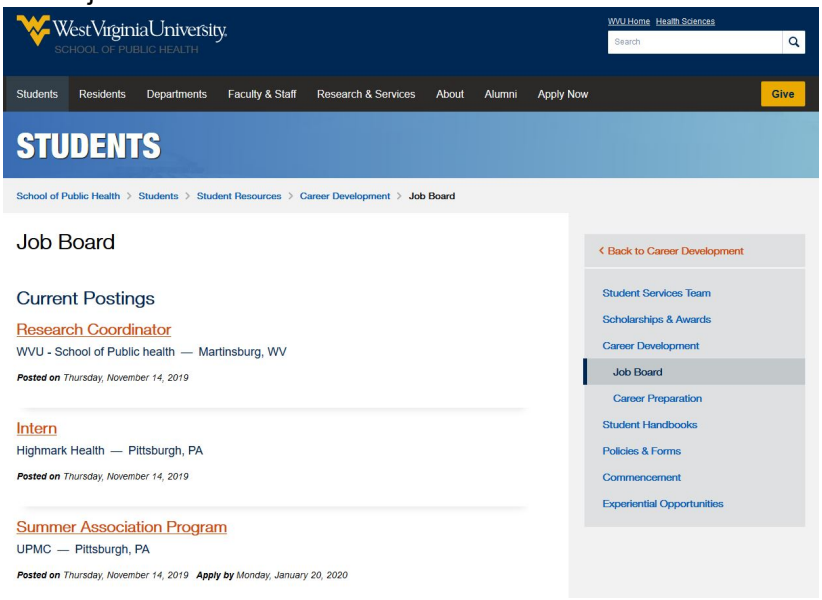


Under that site are two main hubs for students and alumni. The first area is Career Preparation, http://publichealth.wvu.edu/students/student-resources/career-development/career-preparation/ (image below).



On this webpage students can find fourteen files that focus on four key areas of career preparations (Preparing Your Job Application, Preparing for an Interview, Evaluating a Job Offer, and Networking/Career Fairs).

The second area is the Public Health Job Board, http://publichealth.wvu.edu/students/student-resources/career-development/jobs/ (image below). The job board is open access and is filled with local, regional, state, and national jobs within public health. Alumni, community partners, and faculty are asked to share opportunities they receive with the Director of Career Development for broader distribution to the WVU SPH student/alumni network. To date, over 300 positions have been posted on the job board.



Beginning with the fall 2017 entering class, all MPH students are required to meet with Director of Career Development & Student Success in their first semester as part of their PUBH 610 course. During that initial one-hour meeting, the director discusses the student's background and interests to begin a conversation about where they may want to go post-graduation. Students also learn about the career services available to them and are encouraged to continue meeting with the director on a regular basis.

In fall 2018, the Director of Career Development & Student Success became the instructor of record for the undergraduate program's PUBH 200 (Introduction to Public Health Careers & Information) class. This 1 credit course is required for all BSPH majors, and is offered each semester. The class meets once a week for fifty minutes during the entire semester (16 weeks). It familiarizes students with professional development and the practice of public health, introducing them to the various settings in which public health professional's work. This is accomplished through the use of alumni panels, guest lectures, experiential learning activities, the creation of a LinkedIn profile, and the completion of an informational interview with a public health practitioner.

All WVU students and alumni also have access to campus-level career services through the WVU Career Services Center, https://careerservices.wvu.edu/. The campus career center has a staff of 16 who specialize in a wide range of career and professional development services including self-assessments, one-on-one career counseling, and other specialized programs and events. They host several large career fairs during the academic year and a large list of workshops each semester. They also maintain a general job board for all students that is hosted via their MountaineerTRAK portal.

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

The School's Director of Career Development & Student Success had three years of career development/coaching experience at another CEPH accredited School of Public Health prior to his arrival at WVU. In his previous role, he was tasked with building out a career development program for public health students at the undergraduate and graduate levels. His orientation to WVU SPH included meetings with returning students, administrators within the school (academic deans and program directors), the WVU Campus Career Center, and key alumni/stakeholders within the WVU SPH network. Outside the School, WVU SPH provides opportunities for the director to attend the annual APHA Conference and ASPPH Annual Meeting to participate in the Career Services Forum that is comprised of other career services leaders from schools and programs of public health.

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.

Example 1: LEARNING JOURNEY TO SOUTHERN WEST VIRGINIA

In October 2018, the Director of Career Development & Student Success partnered with the Assistant Dean of Practice and Service for the inaugural SPH Learning Journey. The focus of the series is to expose SPH students to public health (and public health practitioners) at work in various communities around the state of West Virginia. For the first trip, a group made up of 3 SPH staff, 3 SPH faculty, and 16 SPH students made the trip to Southern West Virginia.

The first stop on the tour was the Beckley Exhibition Coal Mine in Beckley, WV. There students visited the West Virginia Coal Mining Museum and were taken on an underground tour of a former working mine to explore the conditions and occupational hazards that still exist for many workers in Appalachia today. The tour was led by a retired miner.

The second stop on the trip was the WV Air National Guard Armory in Glen Jean, WV. Students received an in depth briefing about the role members of the Air National Guard play in one of the largest annual events in the state, Bridge Day. Each year, on the third Saturday in October, officials in Fayette County, WV close the New River Gorge Bridge (the largest arch bridge in the western hemisphere) to vehicle traffic and open it up exclusively to pedestrians. They host a large festival, have lots of food trucks, vendors, and musicians. Thousands of visitors flock to Bridge Day each year. The folks at the ANG spoke to us about their work in threat preparedness and emergency response for Bridge Day along with other small and large scale events in the region and state. Students were then introduced to the Director of the Fayette County Health Department who provided an overview of the services they provide for their county, their staff makeup, areas of need, and their role in collaborating with a number of stakeholders, including the ANG, for Bridge Day.

Next, students were bused to Burnwood National Park, on site at the New River Gorge Bridge, to get a look at the mobile command center that was established by the Fayette County Emergency Director for Bridge Day. Students were broken up into small groups for tours of the Department of Homeland Security's Command Center.

The final stop of the learning journey was the Hawk's Nest Memorial and Worker Gravesite in Mount Lookout, WV. Here, students heard about the history of Hawk's Nest and the occupational hazards associated with the construction of the Union Carbide Tunnel. This was the site of one of the worst industrial tragedies in U.S. history.

Example 2: MEET THE WVU OFFICE OF HEALTH SERVICES RESEARCH (OHSR)

In October 2018, the Director of Career Development & Student Success collaborated with the directors of the SPH's four internal research centers to launch the Meet the SPH Research Centers Series. The center directors were approached about hosting individual sessions for their centers to showcase the work they do, their primary research foci, and the makeup of their teams for students. On Monday, October 8, 2018, the series kicked off with the Office of Health Services Research. Dr. Adam Baus, Center Director, and his full-time team of five spoke to a group of 15 SPH students. The session started with a welcome from the center director. The core team members were then introduced. Each team member was asked to speak briefly about their role(s) within the center and provide information about their educational backgrounds and career trajectories. There was then a fifteen minute discussion about several of the large research projects currently housed within the center. This led to a ten minute discussion about opportunities for students to engage/connect with the center on the work being done. Finally, the session concluded with a question and answer session with the students in attendance.

Example 3: NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH) TOURS

On Wednesday, April 4, 2018, a group of seven students, and the Director of Career Development and Student Success, were invited to the CDC-NIOSH branch campus in Morgantown for tours of several working laboratories. Per the request of the team at NIOSH, the group was limited to a small number of students to make it easier to navigate some of the smaller labs. During each individual

visit, the Director of Career Development & Student Success asked each presenter from the lab to provide a brief introduction of their educational background and provide a few quick tips for what a student might want to study/get experience with if they wanted to obtain a similar position in the future.

After checking in, students started the tours in the Motor Vehicle Safety Lab with Mr. Richard Current. Students were able to get behind the wheel of a simulator that was being used to study the threat of large vehicle roll overs (semi-trucks, fire trucks, and other large vehicles driven by first responders). After rolling over a virtual fire truck, students got to hear about the technology being created to assist in the prevention of such incidents.

The second tour was with the team at the Anthropometry Lab. Mr. Rich Whisler spoke about the 3D body imaging technology they have on site and the study being conducted to update federal regulations for safety harnesses being worn by construction workers. Students learned that those federal guidelines haven't been updated in over 40 years and that many of the safety harnesses used today were designed to work for workers who fit the same body types of the 1-2 models who were used in the design process. For that reason, many occupational hazards, including death, can occur with the very equipment that is intended to save lives.

The third tour was at the Flu lab with Dr. Bill Lindsley. Dr. Lindsley showed students the work being done to study first responders (EMS/Ambulance Drives) exposure to air borne diseases during patient transport. Students got to see the equipment used to collect samples from fellow students who present with flu like symptoms at the campus clinic.

The final tour was of the NIOSH Coal Van/Mobile Clinic. The tour was led by Dr. Cara Halldin (WVU SPH Alumna). Dr. Halldin provided an overview of the NIOSH Coal Workers' Health Surveillance Program which studies the causes and effects of respiratory diseases related to coal mine dust exposure and provides information and free vital health screenings to coal miners throughout Appalachia.

Example 4: WVU SPH ALUMNI VIRTUAL MEET & GREET

On Thursday November 14, 2019. The Director of Career Development and Student Success hosted the inaugural Alumni Virtual Meet & Greet via the Skype platform. A broadcast e-mail invitation was distributed to all SPH alumni, via the WVU Alumni Association Master listserv on October 25 and interested alumni were asked to RSVP for the event to receive the link for the one hour meeting. The meeting was designed and marketed with four purposes:

- introduce the Director of Career Development and Student Success to alumni who graduated prior to his arrival and remind alumni that career services are available to them, regardless of their graduation date
- provide a platform for attendees to network/connect with other graduates
- provide updates on current/future career service offerings for students to identify areas for engaging alumni with current students
- seek feedback from alumni about how they can best be served by the School in the professional development/career services areas

The initial meeting was attended by four alumni (3 MPH, 1 BSPH). The alumni in attendance expressed gratitude for the creation of the event and engaged in dialogue for one hour and twenty minutes, going beyond the originally allocated time by twenty minutes. All attendees provided an in depth overview of their current positions, challenges faced in their current roles, and provided helpful

advice for other attendees. A few topics that were discussed among the group included: tips for navigating federal application systems (USAJOBS), skills that hiring managers are looking for in their organizations, and statistical software(s) that help candidates standout in their fields. Attendees indicated they would love to see the series become a recurring lunchtime meeting with the intention of hearing what other alumni are doing after graduation. Plans for the frequency of future meetings will be discussed with the Alumni Leadership Council.

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.

In spring 2016 (January), 44 graduate students from SPH programs (MPH, MS, PhD) completed a student satisfaction survey that was centrally administered by the HSC. Students were asked to rate the quality of their professional/career development opportunities on a 5 point Likert scale (Poor, Fair, Good, Very Good, or Excellent). 38 students provided a response to the question with 47% (18/38) of the respondents indicating that their opportunities were either very good or excellent.

For spring 2017 (January), 55 total graduate students from SPH programs completed the same survey. Of that total, 50 students provided a rating for their career/professional development opportunities utilizing the same scale as the previous year. 42% (21/50) of those students rated the quality of their professional/career development opportunities as very good or excellent.

In spring 2018 (January), the HSC altered the survey slightly and added a few additional questions about careers. For that cycle, 31 graduate students responded. When asked about professional development/career opportunities, 40% of the 30 students responded to the question with very good or excellent. Additionally, 91% (13 respondents) indicated they would feel comfortable talking to their advisor about career opportunities while 77% (18 respondents) indicated they agree or strongly agree with the idea that they have sufficient interactions with faculty to guide their education and career goals.

In spring 2019 (January), 15 graduate students responded to the survey. When asked to rate their professional/career development opportunities provided by the school, 60% (14 respondents) rated the school as very good or excellent. During that survey cycle, 75% (4 respondents) of the survey takers indicated they would agree or strongly agree that they feel comfortable speaking to their advisor or faculty about their career goals.

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

Strengths: The School created a full-time Director of Career Development & Student success to meet the demands related to career services for students and alumni across all degree programs.

Weaknesses: While getting programs and events up to speed in this area, career services program assessment has not been implemented fully.

Plans: Plans After an 18-month learning curve and opportunity to better understand university barriers to survey implementation and procedures and process regarding alumni our plans are to provide a comprehensive survey to all graduates to better understand needs in terms of career development and advising.

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 any formal complaints and/or grievances to school officials, and about how these procedures are publicized.

All WVUSPH students are introduced to the formal grievance/complaint process by familiarizing them with the policies during a morning New Student Orientation (NSO) Overview Session during the mandatory NSO (embed PPT) for 2019 & student-focused website https://provost.wvu.edu/governance/academic-standards-resources/faq-for-students/did-you-know and during afternoon break-out sessions conducted by the MS, MPH, and PhD Program Directors (see section H3 in the ERF to view the new student orientation agenda). Students are also provided information and access to the formal complaint process for grade appeals, behavior and/or sexual misconduct, and all students rights and responsibilities via respective program handbooks (see section H3 in the ERF to view the student handbooks), student websites https://studentconduct.wvu.edu/home and on all course syllabi (examples of syllabi go here). During the 2019 NSO in an effort to encourage students to exercise and become familiar with their rights and responsibilities, we invited Dr. Hulbert and her staff to provide an overview of her office and resources for students. Syllabi, particularly the highlighted content related to Academic Integrity, are provided to each student with a mandatory University deadline. Syllabi audits are conducted at the department level to ensure that required language for academic policies is included. All program directors send notification regarding any training or education related to Academic Integrity via Mountaineer News and SPH Student ENEWS, and respective listserves.

Over the last three years, grievances/complaints have been almost exclusively related to issues involving plagiarism and/or stemming from an action considered by the University to fall under the category of academic dishonesty. In 2018 West Virginia University hired a Director of Academic Integrity (Dr. Azalea Hulbert) https://studentconduct.wvu.edu/staff/director-of-academic-integrity and under her guidance the University has shifted the focus from a punitive stance for academic infractions to one of education. The Academic Dean invited Dr. Hulbert to an October 2018 and March 2019 Academic Affairs regularly scheduled meetings to ensure adequate training and knowledge of all formal complaint/grievance policies for Department Chairs, Program Director and Teaching Faculty. This training included a FAQ's session and specific instructions on the mechanisms for engaging that office during a complaint process.

Exclusive to WVU SPH undergraduates, there is an appeal process for negative decisions for students requesting a transfer to the BSPH program. The first level of appeal is the Assistant Dean of Undergraduate Studies (ADUGS) and at her discretion for clear-cut decisions, (i.e. students do not meet criteria as published online via SPH webpage and University webpage describing undergraduate major options). For those instances where a decision is not clear-cut, appeals go to the Academic and Professional Standards Committee. This step in the process s communicated directly to the student by the Assistant Dean for Undergraduate Studies. The final decision of the APSC is also communicated directly to the student by the ADUGS.

Depending on the nature of the complaint, West Virginia University requires a specific course of action. Grade appeals and general complaints can initiate and end internal to the SPH. However, matters related to offenses/complaints that require review from the Office of Diversity, Equity and

Inclusion (DEI), students are protected from having their identity/complaint made public and communication will come directly from that office (https://diversity.wvu.edu/).

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

Grade Appeals

Currently WVU has a formal process that all programs must adhere to. There are three levels of appeal. For undergraduate and graduate students the first level of a grade complaint is the Department Chair, followed by Program Director, and then to Academic Dean Instructor. The student may or may not copy the respective program director of his/her program (not required), however, unless the student requests otherwise, all copied are included in the correspondence and of any final decisions. A final decision of an appeal is communicated back to the student in writing.

There is one exception for grade appeals at the Graduate level. For PhD students only, a second failure of a comprehensive exam "may" result in program dismissal. This process is formally dictated by the Health Sciences Center (HSC) Office of Graduate Education and the Biomedical Sciences Program. The PhD Program at WVUSPH is governed by both. General language and HSC policies that explain policies for program dismissal are explained to PhD students during a mandatory NSO, in group meetings with each incoming cohort, and in individual advising sessions, all conducted by the PhD Program Director. Additionally, each doctoral advisor explains the policies and procedures for program dismissal at advising meetings during each semester and during mandatory meetings prior to sitting for the doctoral candidacy examination. For Epidemiology doctoral candidacy meetings are held with the Department Chair. For Occupational and Environmental Health (OEHS) and Social and Behavioral Sciences, doctoral candidacy meetings are hosted by the students' doctoral dissertation chair.

Title IX Violations

WVU's Office of Equity Assurance investigates any Title IX related incidents reported to the University. If you or someone you know has been a victim of sexual assault, power-based personal violence, or gender-based discrimination, you can file a report with WVU's Title IX Coordinator online or through mail. If you wish to speak to someone anonymously, please call or text the Title IX On-Call Line. Someone is available to take your call, twenty-four hours a day. https://titleix.wvu.edu/information-for/information-for-victims

Academic Integrity Violation

The Office of Academic Integrity works to fulfill West Virginia University's commitment to academic honesty. The office engages the campus community in education and outreach and is available to assist both students and faculty in understanding WVU's academic integrity policy and resolving incidents that occur.

All appeals, the appeal process, final decisions, and communication of the results of an inquiry, are kept in an electronic file in the Academic Dean's Office, unless otherwise directed by University policies.

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.

2019

Program Dismissal Appeal (PhD Student). After two consecutive failures of the EPID Comprehensive Examination, a doctoral student received a letter with template language and handbook citation that described consequences for two consecutive failures of an examination. Student wrote an appeal based on clear language in dismissal letter of the right to do so. Letter addressed to the Academic Dean. Academic Dean sent examination results for "blind" review to determine fairness in grading. Review upheld the grade of failure. Academic Dean corresponded to student that appeal based on unfairness in grading, time to preparation, and availability to information regarding the exam not valid. Student was informed of the next level of appeal to the Dean. Student appealed the decision to Dean. Dean found in students favor based in further investigation finding that an oral examination was not given during the second exam as dictated in students' handbook. Student was permitted to take a third examination with committee appointed by the Dean in consultation with the PhD Program Director and the Academic Dean. Student was successful in third attempt in written and oral examination. Program dismissal reversed. PhD Program Director communicated with student results of examination and directed student to form dissertation committee as part of the advance to candidacy.

Grade Appeal (Occupational Medicine Resident). Student appealed the award of a "B" in a class based on the course syllabus that communicated the class as a "Pass/Fail" in replace of a letter grade. Student wrote to Occupational Medicine Program Advisor to appeal this action. Program Advisor communicated with the Academic Dean who immediately contacted the Instructor of Record. Error was corrected.

2018

Plagiarism of Published Authors' Work (PhD student). For end-of-year assignment in EPID class student turned in a meta-analysis report. Professor utilized TurnItIn Software and determined a 68% match with published work of another author. Student given an "F" for the assignment and an Academic Dishonesty form was filled. Professor provided clear and in-depth communication with student about the plagiarism including the published manuscript, means by which plagiarism was detected and consequences. Academic Dean was consulted about process. Additionally, students' Academic Advisor and Department Chair were copied regarding offense and consequences. Student requested meeting with Academic Dean to "tell their side of the story." Student did not actually appeal grade but rather wanted to provide an explanation for behavior and ask that this action not be held against him/her in future academic settings. Student was assured by Academic Dean that the process was complete and advised to report any perceived prejudice in the future as a result of this event.

Failure to allow student to make-up exam due to a court date (Occupational Medicine Resident). Student appealed Course Instructor's decision to not allow a make-up exam due to scheduled absence. Academic Dean and Program Advisor reviewed the students' excuse and notified Instructor.

Student had a scheduled court date for a child custody hearing, which could not be changed. Academic Dean communicated with Instructor. Make-Up examination allowed. Program Advisor communicated outcome to student.

Frequent changes to course syllabus (Occupational Medicine Residents). Required elective course had several assignment changes due to unexpected departure of scheduled instructor less than three weeks prior to the start of the semester. Students appealed to Program Advisor asking for explanation of the number of permitted syllabi changes for faculty. Academic Dean investigated and learned that topics and speakers were changed and not evaluation of course material, learning objectives, or assessment methods. Instructor was asked by Academic Dean to finalize syllabus and ensure that all students received final copies

Internal Transfer Student (UG). Undergraduate student did not meet minimum requirements for transfer to BSPH program. Appealed decision to allow transfer based on GPA in Public Health courses. Appeal was brought by Assistant Dean of Undergraduate Studies to WVUSPH Academic and Professional Standards Review Committee. Committee decision was to allow student to transfer into BSPH program based on "B" average in Public Health courses. Decision communicated by Assistant Dean of UG Studies.

Suspension Appeals (UG). Undergraduate student appealed decision to be placed on academic suspension based on GPA. Appeal was brought to WVUSPH Academic and Professional Standards Review Committee. Committee for review. Committee decision was to uphold academic suspension based on GPA of less than 1.5 and concern for students continued success in major. Decision was communicated by Assistant Dean of UG Studies.

Failure to add extra points in final grade determination (Undergrad Class). Students received final grades late. Several students in this class appealed the final grade stating that "their extra credit points were not calculated in final grade." Students appealed to Assistant Dean for Undergraduate Studies. Academic Dean was asked to weigh in and contacted the Instructor who was asked to recalculate grades and determine veracity of each students' claim. In one case there was a legitimate error in calculating grades. Instructor communicated with each student and copied Academic Dean and Assistant Dean for UG Studies with outcome.

Unfairness in Assignments and Change in Syllabus (UG Students). Course Instructor left in the middle of semester to pursue job opportunity. Adjunct faculty instructor assigned to teach remainder of the class. Students complained and appealed to the Assistant Dean of UG Studies the decision to restructure course and change assessments of students' work for final grade. ADUG contacted Academic Dean. Academic Dean contacted Department Chair who hired Adjunct Instructor. Instructor was informed that a change in assessment was not permitted and he/she would need to follow syllabus as written. ADUG attended two classes to ensure that students were provided the appropriate indication that the course syllabus would not change and to witness any fallout. Semester proceeded without incident but SEI's revealed definite dissatisfaction with course. ADUG provided education and training for all faculty teaching UG students with emphasis on the need to uphold syllabus as a student contract.

Gender Bias in Grading & Inappropriate Remarks re Women (PhD Student). Student verbally complained to Academic Dean that males in one class appeared to routinely be awarded more points for participation than females. Further that male Professor routinely made sexualized remarks about women (i.e.: is it true blondes have more fun) and references to enjoyment with working with "young women in the field due to their eagerness to be compliant". Student reported that both male and female students were made uncomfortable in this setting. Student stressed need for anonymity. Academic Dean encouraged student to file an anonymous report via the published phone number/information for Title IX Office. Academic Dean filed a written report of incident with faculty members' name. Title IX Office contacted Academic Dean and insisted that they would only investigate if students' name was given. Academic Dean refused to give students name stating the students' expressed desire for confidentiality and potential conflict of interest. Title IX Office relentless in their pursuit to identify student. Academic Dean notified Dean of circumstances and accompanied student to Title IX Office to witness reporting. Title IX Office interviewed Professor but shared no further results. Dean met with Professor in question and placed a detailed note in faculty members' file of occurrence.

2017

Grade Appeal – Unfairness in Grading (MPH Student). Student reported to Department Chair that Instructor of Record rarely attended/held class and final grades were based on project with little to no details or direction from Instructor. Student provided final paper and appealed a grade of "C". Department Chair contacted Academic Dean who provided the rules and procedures for an appeal and students' rights to receive a timely response. Instructor was notified to provide explanation of final grade. Instructor claimed that grade was based on similarities between students' work and other published documents via TurnItIn Software. Further, Instructor stated that he would be unable to provide any help to student within the mandatory 10-day time frame for an appeal because he was busy. Department Chair reviewed students' work and regraded paper awarding a grade of "B". Student was satisfied with this outcome which was communicated by the Department Chair.

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

Strengths: The School provides several layers of advising to students to ensure that any changes in academic and/or appeal procedures and policies are communicated to students in a timely manner. Academic Policies and procedures are communicated to students during their respective mandatory orientations, UG, MPH, MS, and MPH Student handbooks, Student ENEWS, on course syllabi, by respective program advisors, and during individual student appointments. We have also taken advantage of several opportunities to remind senior leadership, program directors, and advisors of academic policies and students' rights and responsibilities during scheduled Academic Affairs, Dean's Council, and Program Advisors meetings. We have a very well articulated and successful feedback loop that almost always begins and ends with the Academic Dean so that closure is achieved. We are pleased that the number of appeals over the last three years are few and attribute this to our efforts focused on student-centric communication.

Plans: With the changes in Academic policies and procedures in 2019 we have determined that it is best to appointment and Academic Integrity Officer who can help ensure that students are provided

with the appropriate support during a grievance and appeal process commensurate with their catalogue year and in line with University requirements.

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 of Public Health places an emphasis on recruiting academically talented and diverse students that want to contribute to the Public Health workforce in West Virginia and the Appalachian Region. We achieve this by utilizing the talents of two full time staff and several student "Ambassadors" that are selected by a competitive process. In addition, SPH faculty, staff, students, and alumni engage in a variety of recruitment efforts, examples of which are below:

- Graduate fairs (Master and Doctorial programs): The SPH participates in graduate fairs hosted by undergraduate institutions and those sponsored by ASPPH (TIPH Fairs).
- National conferences and associations (Master and Doctorial programs): The School has a presence (board members, presenters, exhibitors, and/or ad placements) within public health–related conferences and association meetings, such as APHA.
- Virtual Fairs(Master and Doctorial programs): Primarily hosted by SOPHAS
- Undergraduate fairs (Undergraduate program): The SPH participates in undergraduate colleges and high schools recruitment fairs in the region.
- On Campus Events (all programs): The SPH recruitment staff and student ambassadors attend multiple events on campus to increase student awareness of our program offerings.
- On Campus Visits (all programs): The SPH recruitment staff and student ambassadors provide tailored tours of the campus as well as introducing prospective students and parents to faculty and program directors.
- Communications (all programs): The SPH utilizes the University's effective and efficient communication plan tailored to each program. The communication plan consists of email, telephone, direct mail, and social media. Communication starts after the initial inquiry and continues to matriculation.

Undergraduate program – University Relations provides oversight of all undergraduate recruitment through a specific communication plan and event list with projected goals for each program.

Graduate programs - The SPH has autonomy on its graduate level recruitment effort and target goals.

Detailed information for communication and recruitment, outlined by degree program, can be found in the H4 electronic resource folder.

2) Provide a statement of admissions policies and procedures. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.

The information below is broken down by discipline.

Undergraduate Program

The WVU School of Public Health (SPH) admits students into the Bachelor of Science in Public Health program via direct admission for both first time freshmen and external transfers for fall and spring semesters.

Bachelor of Science in Public Health

New Freshman Admissions: Students are eligible for direct freshman admission if they meet these minimum guidelines:

- 3.0 Cumulative High School GPA; or
- ACT of 21 (superscored) and 2.75 Cumulative High School GPA; or
- SAT of 1060 (superscored) and 2.75 Cumulative High School GPA

Students are eligible for admission into the Center for Learning, Advising and Student Success and the pre-public health program if they meet these minimum guidelines:

- 2.75 Cumulative High School GPA; or
- ACT of 19 (superscored) and 2.5 Cumulative High School GPA; or
- SAT of 990 (superscored) and 2.5 Cumulative High School GPA

Internal (WVU) transfer students who have completed undergraduate coursework at WVU or another institution of higher education prior to applying to the Public Health major are eligible if they meet the following minimum guidelines and attend a public health information session:

- 2.5 Cumulative Undergraduate GPA

External transfer students: Students who have completed undergraduate credits at another institution wishing to transfer into WVU who meet the transfer admission GPA should apply to WVU as transfer students and will be accepted directly into the program by WVU Admissions.

- 2.5 Cumulative Undergraduate GPA

http://catalog.wvu.edu/undergraduate/schoolofpublichealth/publichealth/#admissionstext

Graduate Programs

Master of Public Health (MPH) in Biostatistics

Admissions Guidelines

- A baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0.
- Basic competencies in mathematics.
- GRE scores of 150 (verbal), 150 (quantitative), 3.5 (analytical writing), or a terminal degree.
- TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based).

Application Process

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), http://www.sophas.org/. **The MPH Admissions process has two steps**. (1) All **MPH applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, https://graduateadmissions.wvu.edu/.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.
- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.
- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE ***code: 0157****. This code MUST be used, otherwise, your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code.*

Master (MS) in Biostatistics

Admissions Guidelines

- Baccalaureate degree from an accredited college or university (preferred GPA: 3.0 overall; 3.4 for quantitative courses)
- Course experience including:
    - Multivariable calculus (equivalent to WVU MATH 251)
    - Matrix or elementary linear algebra (equivalent to WVU MATH 343)
    - Knowledge of a programming language
- GRE scores: 155 quantitative, 150 verbal, and 3.5 for analytical writing
- A completed MS application, including a Statement of Purpose
- Three letters of recommendation

Application Process

Complete the WVU graduate application and submit with the processing fee: http://graduateadmissions.wvu.edu/.

Applicants must submit a statement of purpose, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. The deadline for applications to be considered for the fall (no spring/summer admissions are permitted) is July 1 (priority deadline: April 1).

Applications that are complete will be sent to the department for review. Students will receive an e-mail through from the WVU School of Public Health regarding their recommendation for acceptance.

Applied Biostatistics Certificate

Admissions Guidelines

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0 (official transcripts required)
- GRE scores or a terminal degree (MD, Ph.D., etc.)
- Essay describing previous education and experience and career objectives
- Resume or curriculum vitae
- At least two letters of recommendation
- Computer skills are a program requirement. It is the responsibility of the ***students to become skilled in computer applications*** and to participate in the Health Sciences Center Mandatory Laptop Program.
- The admissions process will include a 15-20 minute phone interview between the Biostatistics Certificate Admissions Committee and the applicant.

Students currently enrolled at WVU should fill out the admissions form for current students to apply for the Applied Biostatistics Certificate. Please contact Dr. Christa Lilly with questions or the completed form.

Students interested in applying for the Applied Biostatistics Certificate must:

- Complete the WVU graduate application and indicate Applied Biostatistics Certificate and submit with the processing fee. https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad

- Submit official school transcripts and official GRE scores to:
  WVU HSC Admissions
  64 Medical Center Drive
  1170 HSC North
  Morgantown, WV 26506

- International students must submit to:
  Office of Graduate Admissions and Recruitment
  PO Box 6510
  Morgantown, WV 26506-6510
  http://catalog.wvu.edu/graduate/publichealth/biostatistics/#admissionstext

Master of Public Health (MPH) in Epidemiology

Admission Guidelines

- A baccalaureate degree from an accredited college or university (required)
- Preferred minimum GPA of 3.0
- Preferred minimum GRE scores of 150 (verbal), 155 (quantitative), and 40. (analytical writing)
- Personal Statement
- Three academic letters of recommendation
- TOEFL scores (minimum 550 paper-based, 213 computer-based, 80 internet-based) *International students only*

Application Process

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), http://www.sophas.org/. **The MPH Admissions process has two steps**. (1) All **MPH applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, https://graduateadmissions.wvu.edu/.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.

- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.

- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE ***code: 0157****. This code MUST be used, otherwise, your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code.]*

Doctor of Philosophy (Ph.D.) in Public Health Sciences (Epidemiology Major)

Admission Guidelines

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- Preferred GRE scores of 150 Verbal; 155 Quantitative; and 4.0 Writing.
- WVU requires international students to submit TOEFL scores. Preferred scores are as follows: 550 on the paper-based test; 213 on the computer-based test; and 80 on the internet-based test.

Application Process

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, http://www.sophas.org/. If you are accepted into the Ph.D. program by the School, the next step is for you to complete a WVU Graduate Application, https://graduateadmissions.wvu.edu/.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement
- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:

- APPLY EARLY! Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. *Your application may not be reviewed if it does not contain verified transcripts and test scores.*

- *When submitting your GRE scores,* **be sure to use the college code 0157 for the WVU School of Public Health.** *This code MUST be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.*
- Submit your application once you have provided the required information. DO NOT wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the School of Public Health Admissions Committee.

Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

Deadlines

Please refer to SOPHAS for the current deadline. Applications received after this deadline will not be considered. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

Review process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the School of Public Health Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

Advanced Standing for Applicants with a Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

http://catalog.wvu.edu/graduate/publichealth/epidemiology/#admissionstext

Master of Public Health (MPH) in Health Policy Management and Leadership

Admission Guidelines

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0
- GRE scores of 150 (verbal), 144 (quantitative), 4.0 (analytical writing)
- TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based) (minimum of 80 internet-based) or IELTS (minimum 6.5)

Application Process

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), http://www.sophas.org/. **The MPH Admissions process has two steps**. (1) All **MPH applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, https://graduateadmissions.wvu.edu/.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.

- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.

- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

*Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE **code: 0157**. This code MUST be used, otherwise, your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code.]*

http://catalog.wvu.edu/graduate/publichealth/hlthplcymangldr/#admissionstext

Master of Public Health (MPH) in Occupational and Environmental Health Sciences

Admission Guidelines

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0.
- GRE scores of 150 Verbal (preferred), 147 Quantitative (preferred), and 3.0 Analytical Writing.
- *International Students Only:* TOEFL scores: minimum 550 paper-based or 213 computer-based.

Application Process

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), http://www.sophas.org/. **The MPH Admissions process has two steps**. (1) All **MPH applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, https://graduateadmissions.wvu.edu/.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.

- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.

- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

*Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE **code: 0157**. This code MUST be used, otherwise, your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code.]*

Doctor of Philosophy (Ph.D.) in Public Health Sciences (Occupational and Environmental Health Sciences Major)

Admission Guidelines

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- The following GRE scores are preferred: Verbal 150; Quantitative 155; and Writing 3.5.
- WVU requires international students to submit TOEFL scores. Preferred scores are as follows: 550 on the paper-based test; 213 on the computer-based test; and 80 on the internet-based test.

Application Process

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, http://www.sophas.org/. If you are accepted into to the PhD program by the School, the next step is for you to complete a WVU Graduate Application, https://graduateadmissions.wvu.edu/.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement
- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:

- APPLY EARLY! Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. *Your application may not be reviewed if it does not contain verified transcripts and test scores.*
- *When submitting your GRE scores,* **be sure to use the college code 0157 for the WVU School of Public Health.** *This code MUST be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.*
- Submit your application once you have provided the required information. DO NOT wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the SPH Admissions Committee.

Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

Deadlines

Please refer to SOPHAS for the current deadline. Applications received after this deadline will not be considered. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

Review process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the SPH Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

Advanced Standing for Applicants with a Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#admissionstext

Master of Public Health (MPH) in Social and Behavioral Sciences

Admission Guidelines

- Baccalaureate degree from an accredited college or university with a preferred GPA of 3.0
- GRE scores of 146 (verbal), 144 (quantitative), 3.0 (analytical writing)
- TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based). Internet-Based TOEFL (iBT) minimum score recommended for admission, which is an 80 (20 or higher in each of the four sections). *International Students Only.*

Application Process

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), http://www.sophas.org/. **The MPH Admissions process has two steps**. (1) All **MPH applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, https://graduateadmissions.wvu.edu/.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.
- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.
- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

*Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE **code: 0157**. This code MUST be used, otherwise, your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code.]*

Doctor of Philosophy (Ph.D.) in Public Health Sciences (Social and Behavioral Sciences Major)

Admission Guidelines

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- The following GRE scores are preferred: Verbal 150; Quantitative 155; and Writing 3.5.
- WVU requires international students to submit TOEFL scores. Preferred scores are as follows: 550 on paper-based; 213 on computer-based; and 80 on internet-based test.

Application Process

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, http://www.sophas.org/. If you are accepted into the Ph.D. program by the School, the next step is for you to complete a WVU Graduate Application, https://graduateadmissions.wvu.edu/.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement
- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:

- APPLY EARLY! Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. Your application may not be reviewed if it does not contain verified transcripts and test scores.
- When submitting your GRE scores, **be sure to use the college code 0157 for the WVU School of Public Health.** This code MUST be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.
- Submit your application once you have provided the required information. DO NOT wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the SPH Doctoral Admissions Committee.

Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

Deadlines

Please refer to SOPHAS for the current deadline. New applications received after this deadline will not be reviewed. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

Review Process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the SPH Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

Advanced Standing for Applicants with an Approved Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#admissionstext

3) Select at least one of the measures that is meaningful to the school and demonstrates its success in enrolling a qualified student body. Provide a target and data from the last three years in the format of Template H4-1. In addition to at least one from the list, the school may add measures that are significant to its own mission and context.

- Quantitative scores (e.g., GPA, SAT/ACT/GRE, TOEFL) for newly matriculating students
- Percentage of designated group (e.g., undergraduate students, mid-career professionals, multi-lingual individuals) accepting offers of admission
- Percentage of priority under-represented students (as defined in Criterion G1) accepting offers of admission
- Percentage of newly matriculating students with previous health- or public health-related experience
- Number of entering students with distinctions and/or honors from previous degree (e.g., National Merit Scholar)
- Percentage of multilingual students

Table H4-1.1: Undergraduate Outcome Measures for Recruitment and Admissions

		2017-2018		2018-2019		2019-2020	
Outcome Measure	Target	*N*	Average	*N*	Average	*N*	Average
New enrollments	50	14	n/a	10	n/a	14	n/a
GPA of students accepting admission	3.00	14	3.59	9	3.91	14	3.62
ACT Scores of students accepting admission	21	11	23.09	4	23.75	5	22.4
SAT Scores of students accepting admission	1060	5	1138	6	1193	11	1041

Table H4-1.2: MPH Outcome Measures for Recruitment and Admissions							
		2017-2018		2018-2019		2019-2020	
Outcome Measure	Target	*N*	Average	*N*	Average	*N*	Average
GPA of all matriculated graduate students	3	22	3.30	29	3.43	35	3.45
GRE of matriculated students MPH Biostatistics	150 Verbal	0	n/a	2	143.50	4	159.50
	150 Quantitative	0	n/a	2	154.50	4	154.25
	3.5 Analytical Writing	0	n/a	2	3.00	4	4.38
GRE of matriculated students MPH Epidemiology	150 Verbal	6	151.67	3	153.33	6	151.83
	155 Quantitative	6	152.33	3	149.33	6	150.83
	3.5 Analytical Writing	6	3.50	3	4.50	6	3.58
GRE of matriculated students MPH Health Policy, Management, and Leadership	150 Verbal	3	153.33	3	152.33	3	148.00
	144 Quantitative	3	148.67	3	148.67	3	143.67
	4.0 Analytical Writing	3	3.67	3	3.50	3	3.83
GRE of matriculated students MPH Occupational and Environmental Health Science	150 Verbal	0	n/a	0	n/a	1	135.00
	147 Quantitative	0	n/a	0	n/a	1	143.00
	3.0 Analytical Writing	0	n/a	0	n/a	1	2.50
GRE of matriculated students MPH Social and Behavioral Science	146 Verbal	7	151.00	6	150.67	6	148.67
	144 Quantitative	7	150.71	6	148.67	6	144.00
	3.0 Analytical Writing	7	3.71	6	3.42	6	3.58

Table H4-1.3: MS Outcome Measures for Recruitment and Admissions							
		2017-2018		2018-2019		2019-2020	
Outcome Measure	Target	*N*	Average	*N*	Average	*N*	Average
GRE of matriculated students MS Biostatistics	150 Verbal	1	153.00	4	150.00	3	154.00
	155 Quantitative	1	161.00	4	157.50	3	159.67
	3.5 Analytical Writing	1	4.00	4	4.00	3	3.67

Table H4-1.4: PhD Outcome Measures for Recruitment and Admissions							
		2017-2018		2018-2019		2019-2020	
Outcome Measure	Target	*N*	Average	*N*	Average	*N*	Average
GRE of matriculated students PhD Epidemiology	150 Verbal	2	150.00	2	153.00	5	151.80
	155 Quantitative	2	147.00	2	152.00	5	150.80
	4.0 Analytical Writing	2	3.25	2	3.50	5	3.90
GRE of matriculated students PhD OEHS	150 Verbal	0	n/a	0	n/a	0	n/a
	155 Quantitative	0	n/a	0	n/a	0	n/a
	3.5 Analytical Writing	0	n/a	0	n/a	0	n/a
	150 Verbal	1	152.00	3	276.33	3	156.33

GRE of matriculated students PhD Social & Behavioral Science	144 Quantitative	1	152.00	3	274.67	3	152.67
	4.0 Analytical Writing	1	4.00	3	4.00	3	3.67

Table H4-1.5: TOEFL Outcome Measures for Recruitment and Admissions

		2017-2018		2018-2019		2019-2020	
Outcome Measure	Target Score	*N*	Average	*N*	Average	*N*	Average
TOEFL matriculated MPH students	80	1	86.00	2	107.50	1	97.00
TOEFL matriculated MS students	80	0	n/a	0	n/a	0	n/a
TOEFL matriculated PhD students	80	0	n/a	0	n/a	1	87.00
IELTS*	n/a	0	n/a	0	n/a	1	6.5

* Alternative to TOEFL

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

Strengths: The recruitment process and communication plan for both undergraduate and graduate programs are one of our strengths. Our communication plans laid out for undergraduate and graduate programs are detailed, and have targeted messaging relating to where in the recruitment season we are. They include all facets of communication; email, phone, mail, and social media aspects. They are designed to correspond with central communication marketing sent out University wide through WVU communications. Having a robust communication plan allows us to centralize our recruitment communications and actions, such as WVU Discovery Days, applications to our program, alumni stories about former SPH experiences with visits to campus. Feedback during the last three years has been overwhelmingly positive regarding recruitment and communications. In the 2018 recruitment cycle we added personal tours as part of our recruitment process. We have received unsolicited feedback regarding the outstanding nature of this personal touch. (a copy of the parent letter is in section H4 of the ERF) The addition of Dean's Ambassadors (https://publichealth.hsc.wvu.edu/students/student-resources/scholarships-awards/deans-ambassador-program/) to our recruitment process has been identified as a major strength of our recruitment efforts.

Weaknesses: The University sets targeted goals and provides extensive formal planning for undergraduate recruitment. Our program would be strengthened by the addition of such resources for graduate recruitment. To date, we have not developed an internal plan for minority recruitment with targeted goals.

Plans: We are in the process of developing a pipeline program to better attract and facilitate the interest, recruitment and retention of West Virginia youth to our BS program.

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.

Degree Programs and Admissions

- School Overview – https://publichealth.hsc.wvu.edu/students/
- BSPH – http://catalog.wvu.edu/undergraduate/schoolofpublichealth/publichealth/#admissionstext
- MPH – Biostatistics: http://catalog.wvu.edu/graduate/publichealth/biostatistics/#admissionstext
- MPH – Epidemiology: http://catalog.wvu.edu/graduate/publichealth/epidemiology/#admissionstext
- MPH – Health Policy, Management and Leadership: http://catalog.wvu.edu/graduate/publichealth/hlthplcymangldr/#admissionstext
- MPH – Occupational and Environmental Health Sciences: http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#admissionstext
- MPH – Social and Behavioral Sciences: http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#admissionstext
- PhD – Epidemiology: http://catalog.wvu.edu/graduate/publichealth/epidemiology/#doctorialtext
- PhD – Occupational and Environmental Health Sciences: http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#admissionstext
- PhD – Social and Behavioral Sciences: http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#admissionstext

Academic Calendar

- https://provost.wvu.edu/files/d/a494b37e-5620-43ab-b91c-46c967254200/2020-21-academic-calendar-revised-050217.pdf

Grading Policies

- Undergraduate: http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#gradestext
- Graduate: http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext

Academic Integrity Standards

- https://provost.wvu.edu/governance/academic-standards-resources

Degree Completion Requirements

- BSPH – http://catalog.wvu.edu/undergraduate/schoolofpublichealth/publichealth/#majortext
- MS – Biostatistics: http://catalog.wvu.edu/graduate/publichealth/biostatistics/#mstext
- MPH – Biostatistics: http://catalog.wvu.edu/graduate/publichealth/biostatistics/#masterstext
- MPH – Epidemiology: http://catalog.wvu.edu/graduate/publichealth/epidemiology/#masterstext
- MPH – Health Policy, Management and Leadership: http://catalog.wvu.edu/graduate/publichealth/hlthplcymangldr/#masterstext
- MPH – Occupational and Environmental Health Sciences: http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#masterstext
- MPH – Social and Behavioral Sciences: http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#masterstext
- PhD – Epidemiology: http://catalog.wvu.edu/graduate/publichealth/epidemiology/#doctorialtext
- PhD – Occupational and Environmental Health Sciences: http://catalog.wvu.edu/graduate/publichealth/occupationenvironmntlhs/#doctorialtext
- PhD – Social and Behavioral Sciences: http://catalog.wvu.edu/graduate/publichealth/socialbehavioralsci/#doctorialtext