Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

Milken Institute School of Public Health Bachelor of Science in Public Health 2020-2021

Note: All curriculum revisions will be updated immediately on the GWSPH website (http://publichealth.gwu.edu).

Program Director

Sara Wilensky, PhD, JD 950 New Hampshire Avenue, NW, Suite 200 Washington, DC 20052 wilensky@gwu.edu 202-994-4126

Undergraduate Program Advisors

950 New Hampshire Avenue, Suite 200 Washington, DC 20052 sphundergrad@gwu.edu

BACKGROUND

Established in 1997, GW SPH is fully accredited by the Council on Education for Public Health (CEPH). GW SPH offers several undergraduate degrees and programs, including the Bachelor of Science in Public Health, Bachelor of Science in Public Health with a Pre-Medical Professions Concentration, Bachelor of Science in Exercise Science (with various concentrations), Bachelor of Science in Nutrition Science, and Minors in Public Health, Exercise Science, Nutrition Science, and Bioinformatics. To learn more about the Milken Institute SPH, visit http://publichealth.gwu.edu.

MISSION STATEMENT

In the context of a liberal arts and sciences tradition that emphasizes critical thinking, analysis, and synthesis of information, students in the Bachelor of Science in Public Health program will acquire knowledge and skills in the critical component elements of public health.

VISION

The Bachelor of Science in Public Health program strives to be an intellectual leader in the development of undergraduate public health education. The program hopes to matriculate students who will take their public health voice into diverse fields of professional practice, bringing an informed and evidence-based viewpoint to public health issues affecting society at large.

VALUES

While nurturing students' capacity to think analytically and creatively, we strive to deepen their commitment to improving the public's health.

LEARNING OBJECTIVES in the LIBERAL ARTS TRADITION

The BS in Public Health, founded in the liberal arts tradition often associated with small private colleges, is a respected and proven model for teaching students to assume responsibility for their own life-long learning. Liberal arts education has its foundation in both the arts (*trivium*, based on three disciplines: language, logic, and rhetoric) and the sciences (*quadrivium*, based on four disciplines of natural phenomena: arithmetic, geometry, astronomy, and music) as studied in medieval universities. While contemporary arts and sciences programs have expanded beyond the imagination and expectations of the medieval founders, it is within the context of this liberal arts tradition that the BS in Public Health strives to prepare students for progressive independence, maturity, knowledge of the world, understanding of diverse inhabitants, and respect for their

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differing points of view. Because this degree is intended to convey technical detail and analytic skills, grounded in a liberal arts philosophical base, it also has the educational objectives of nurturing critical thinking, analysis, and synthesis of information, and recognizing the historical and societal associations of current trends in public health and health care delivery.

CORE COURSE COMPETENCIES

The following competencies are designed to be achieved by all public health majors through the indicated courses:

Upon completion of the Bachelor of Science in Public Health, students will be able to:

- 1. 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 (PUBH 1101, 2110, 3132, 3133, 4140W, 4141.
- 2. 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 (PUBH 1101, 3131,3132, 3133, 3135W, 4140W, 4141, and the Research Methods Selective).
- 3. 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 (PUBH 1101, 2110, 2112, 3130, 3131, 3132, 3133, 3135W, 4140W, 4141.
- 4. Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course (PUBH 1101, 2110, 3132, 3133).
- 5. Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities (PUBH 1101, 2110, 2112, 3132, 3133, 3135W).
- 6. Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation (PUBH 2112, 3130, 3133, 4140W, 4141...
- 7. 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 (PUBH 1101, 3130, 3133, 3135W).
- 8. 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 (PUBH 1101, 3130, 3133, 3135W).
- 9. 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 (PUBH 1101, 2110, 2112, 3130, 3131, 3135W, 4140W).

CAREERS

The BS in Public Health strives to increase awareness and understanding of public health principles among students who are preparing for professional careers in fields such as:

- Allied Health
- Government
- Business
- Health Education
- Health Services Administration
- Law
- Medicine (or another of the health professions)
- Public Health (both those who plan to pursue graduate degrees in public health or students who intend to pursue entry-level jobs in specific sectors of public health, health services, or public policy for which bachelor's level education is appropriate)

ADMISSIONS

Incoming freshman and external transfer students may apply directly to the major through GW admissions.

Internal transfer students accepted into the program matriculate in the semester following admission. We will accept applications from students with a GPA of 2.75 or higher. Students should use the internal transfer form found on the Registrar's website, https://registrar.gwu.edu/undergraduate-internal-transfer. The internal transfer application deadline is October 15th in the fall semester and February 15^{th t} in the spring semester

Students follow the prescribed curriculum effective in the year that he/she matriculates into the BS in Public Health program.

ACADEMIC DEGREE REQUIREMENTS FOR GRADUATION

There are three categories of Degree Requirements: University General Education Requirements, Public Health Core Courses, and Public Health Electives. Students take other elective courses to reach the 120 total credits required to graduate.

A. General Education REQUIREMENTS (19 credit hours)

The Public Health program follows the University General Education Requirements. See the University Bulletin website for most up-to-date version of Gen Ed requirements and approved courses: http://bulletin.gwu.edu/university-regulations/general-education/

B. PUBLIC HEALTH CORE COURSES including RESEARCH METHODS SELECTIVE (31 credits, 11 courses)

The public health major curriculum constitutes 43 credits: 31 core credit credits and 12 elective credit credits offered through the Milken Institute SPH.

Prerequisite Requirements: Please note that these are prerequisites for required core courses, rather than prerequisites to apply to the program.

Required Course	Prerequisite(s)
PUBH 2110	BISC 1005, 1006, 1007, 1008, 1115 (with 1120/1125 lab), 1116 (with 1126 lab), or
	HONR 1033 (Scientific Reasoning & Discovery: Biology Only)
PUBH 2112 &	PUBH 1101- Introduction to Public Health
PUBH 3135W	
PUBH 3130	ECON 1011- Principles of Economics I (Microeconomics)
PUBH 3131	STAT 1051 or 1053 or 1127 or 1111 (STAT 1127 is preferred) or PUBH 3199
	Biostatistics
PUBH 4140W or	PUBH 3130 & PUBH 3135W; no more than 1 other core course can be taken
PUBH 4141	concurrently. Students must also satisfy the Research Methods Selective prior to
	enrolling in 4140W or 4141.

C. PUBLIC HEALTH ELECTIVE COURSES (12 credits).

No more than 9 elective credits may be taken through approved study abroad programs or non-GW domestic courses. Electives must be taken from the Approved Elective list or with approval of the Program Director.

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Program-at-a-Glance 2020-2021

Public Health Core Courses (31 credits- including Research Methods Selective)				
Required Courses	Credits	Course Title		
PUBH 1010*	1	First-Year Experience in Public Health		
PUBH 1101	3	Introduction to Public Health and Health Services		
PUBH 2110	3	Public Health Biology		
PUBH 2112	3	Principles of Health Education and Health Promotion		
PUBH 3130	3	Health Services Management and Economics		
PUBH 3131	3	Epidemiology: Measuring Health and Disease		
PUBH 3132	3	Health and Environment		
PUBH 3133	3	Global Health and Development		
PUBH 3135W	3	Health Policy		
PUBH 4140W or	3	Senior Seminar		
PUBH 4141				
Research Methods Selective [^] (3 credits)				
Choose 1 Course	Credits	Course Title		
PUBH 3152	3	Qualitative Methods in Public Health		

Choose 1 Course	Credits	Course Title	
PUBH 3152	3 Qualitative Methods in Public Health		
PUBH 3199	3	3 Public Health Research Methods	
EXNS 3111	3	Nutrition Science Research Methods	
EHS 2107**	3	Theory and Practice of Research in a Clinical Setting Setting	
SOC 2101	3	Social Research Methods	
PSC 2101 3 Scope and Methods of Political Science		Scope and Methods of Political Science	
PSYC 2101	3	Research Methods in Psychology	
ANTH 3531	3	Methods in Sociocultural Anthropology	

^Additional research methods course as pre-approved by the Program Director

Approved Public Health Elective Courses (12 credits)				
Elective Courses	Credits	Course Title		
AMST 3950	3	Topics: Narrative Medicine in American History <i>only</i>		
ANTH 3504	3	Illness, Healing and Culture		
ANTH 3503	3	Psychological Anthropology		
ANTH 3513/3513W	3	Anthropology of Human Rights		
BADM 4101/4104W	3	Business Ethics and the Legal Environment		
BIOC 3560	3	Diet, Health, and Longevity		
BISC 3450 or BISC 3450W	3	Evolutionary Medicine		
EHS 2107**	4	Theory and Practice of Research in a Clinical Setting		
EHS 2109	3	Infectious Disease and Bioterrorism		
EHS 2175	3	Community Risk Management and Safety in EHS		
EXNS 1114	3	Community Nutrition		
EXNS 1199	3	Topics: Nutrition & Disease only		
EXNS 1199	3	Topics: International Nutrition <i>only</i>		
EXNS 2116	3	Exercise and Health Psychology		
EXNS 2119	3	Introduction to Nutrition Science		
EXNS 2122	3	Food Systems in Public Health		
EXNS 2123	3	Nutrition and Chronic Disease		

EXNS 3995***	0-6	Undergraduate Research	
GEOG 1003	3	Society and Environment	
GEOG 2104	3	Introduction to Cartography and GIS	
GEOG 2127	3	Population Geography	
GEOG 2137	3	Environmental Hazards	
GEOG 3106	3	Intermediate GIS	
HIST 3001/HIST 3363	3	Race, Medicine, and Public Health <i>only</i>	
HLWL 1106	3	Drug Awareness	
HLWL 1109	3	Human Sexuality	
HSCI 2101	3	Psychosocial Aspects of Health and Illness residential only	
HSCI 2105	3	Current Issues in Bioethics (may not be taken in a semester when PUBH	
		3151W is offered; students may only take one of the two courses)	
PHIL 2124	3	Philosophies of Disability	
PHIL 2125W	3	Philosophy of Race and Gender	
PHIL 2281	3	Philosophy of the Environment	
PSYC 3128	3	Health Psychology	
PSYC 3199	3	Substance Abuse and Addictions	
PUBH 1102	3	History of Public Health	
PUBH 2113	3	Impact of Culture Upon Health	
PUBH 2114	3	Environment, Health and Development	
PUBH 2117	3	Service Learning in Public Health	
PUBH 3115	3	Global Health and Human Rights	
PUBH 3116	3	Global Health Systems Performance	
PUBH 3136	3	Health Law	
PUBH 3137	3	Global Public Health Nutrition	
PUBH 3150	3	Sustainable Energy and Environmental Health	
PUBH 3151W	3	Current Issues in Bioethics	
PUBH 3199	1-3	Various Topics in Public Health	
PUBH 3201	3	Introduction to Bioinformatics	
PUBH 3202	3	Introduction to Genomics	
PUBH 3995***	0-6	Undergraduate Research	
PUBH 4201	3	Practical Computing	
PUBH 4202	3	Bioinformatics, Algorithms, and Data Structures	
STAT 2118	3	Regression Analysis	
STAT 2183	3	Intermediate Statistics Lab/Packages	

^{*}PUBH 1010: Internal transfer students may satisfy this requirement if they took EXNS 1103, EXNS 1109, or a first-year experience course at another school within GW.

^{**}EHS 2107 cannot be double counted as an elective and as meeting the research methods requirement.

^{***} EXNS/PUBH 3995: BSPH majors may only apply 3 credits of Undergraduate Research toward their major elective requirement and may only take 6 credits total. This course may be taken Pass/Fail with the permission of the instructor.

EXPECTATIONS OF STUDENTS/POLICIES

- 1. Follow the internal transfer process outlined above;
- 2. Consult a Milken Institute SPH Undergraduate Advisor prior to the first term's course registration and in future terms as needed. The student is also expected to consult a program advisor in all matters affecting the program of studies, such as changes, substitutions, or withdrawals;
- 3. Students may only double count one course with the BSPH major and any other major or minor.
- 4. _Students must earn a C- or higher in all courses required for the major (core and elective) to graduate with a BSPH major.

Students are responsible for reviewing and understanding the policies and requirements as outlined in the Undergraduate Student Handbook, which can be found here: https://publichealth.gwu.edu/content/services-students and the University's Bulletin found on the University website here: http://bulletin.gwu.edu/.

5. Earn 120 credits within the established course distribution outlined below:

Summary Credit Distribution Chart					
Category	Credits	Premedical Credits			
Gen Ed Requirements	19	52-71*			
Public Health Core Curriculum/Research Methods	31	31			
Public Health Electives	12	12			
Additional Electives	58	6-25			
25-Total Number of Credits	120	120			

^{*} Gen Ed's credit total = Gen Ed's PLUS premedical concentration curricular requirements.

Course Descriptions, program information, and Registration information can be found on the website: http://publichealth.gwu.edu/academics; and http://bulletin.gwu.edu/courses/PUBH/.