# Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

# **Program Director**

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# Milken Institute School of Public Health Bachelor of Science in Public Health 2022-2023

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

# **GWSPH Undergraduate Advisors**

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### BACKGROUND

Established in 1997, GW's Milken Institute School of Public Health (GWSPH) is fully accredited by the Council on Education for Public Health (CEPH). GWSPH 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, Bachelor of Science in Nutrition Science with a Pre-Medical Professions Concentration, Minors in Public Health, Exercise Science, Nutrition Science, and Bioinformatics, and dual BS/MPH degrees in Public Health and Nutrition Science. To learn more about GWSPH, visit <a href="http://publichealth.gwu.edu">http://publichealth.gwu.edu</a>.

#### **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. Students with a Pre-Medical Professions (PMP) concentration will also acquire knowledge and skills in areas critical to pursuing a future in the medical profession.

#### VISION

The Bachelor of Science in Public Health program strives to be a leader in the development of undergraduate public health education. The program hopes to matriculate students who will carry forward their public health knowledge and skills into diverse fields of professional practice, including the medical professions. Our students will bring an informed and evidence-based viewpoint to public health issues affecting medical practice and 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 and bringing diverse public health viewpoints to their future professions.

# LEARNING OBJECTIVES in the LIBERAL ARTS TRADITION

The Bachelor of Science (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 well beyond the imagination and expectations of 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 differing points of view. Because this degree is intended to include 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. The BS in Public Health with a PMP concentration is intended to provide students with a major that both achieves the goals of a liberal arts education in public health and provides them with the requisite knowledge and skills to pursue a future in the medical professions.

#### PUBLIC HEALTH 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:

- 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)
- 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, 2110, 2142, 3131, 3132, 3133, 3135W, 4140W, 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)
- 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, 4140W)
- 6. Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation (PUBH 2112, 3130, 3133, 4140W)
- 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)
- 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, 3133, 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, Nursing, and other health professions
- Public Health (both those who plan to pursue graduate degrees in public health and students who intend to pursue entry-level jobs in specific sectors of public health, health services, or public policy for which a 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 transfers from students with a GPA of 2.75 or higher. Students should use the internal transfer form found on the Registrar's website: <u>https://registrar.gwu.edu/undergraduate-internal-transfer</u>. The internal transfer application deadline is October 15<sup>th</sup> in the fall semester and February 15<sup>th</sup> in the spring semester.

Students follow the prescribed curriculum effective in the year that they matriculate into the BS in Public Health program.

# **DEGREE REQUIREMENTS**

There are three categories of Degree Requirements for all Public Health students: (1) University General Education Requirements; (2) Public Health Core Courses; and (3) Public Health Electives. Students in the PMP concentration will also take PMP requirements/recommended courses. Students take additional elective courses to reach the 120 total credits required to graduate.

#### **General Education Requirements (19-20 credits)**

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

|                              | University General Education Requirements (GenEd) Courses<br>(See University Bulletin for General Education Requirements)                 |       |
|------------------------------|---|-------|
| University<br>Writing        | UW 1020 UNIVERSITY WRITING OR HONR 1015   | 4     |
| Humanities                   | ONE COURSE IN THE HUMANITIES<br>http://bulletin.gwu.edu/university-regulations/general-education/   | 3     |
| Mathematics or<br>Statistics | ONE COURSE IN EITHER MATH OR STATISTICS<br>http://bulletin.gwu.edu/university-regulations/general-education/                              | 3     |
| Science                      | ONE NATURAL OR PHYSICAL SCIENCE COURSE WITH<br>LABORATORY EXPERIENCE<br>http://bulletin.gwu.edu/university-regulations/general-education/ | 3-4   |
| Social Science               | TWO COURSES IN THE SOCIAL SCIENCES<br>http://bulletin.gwu.edu/university-regulations/general-education/                                   | 6     |
|                              | TOTAL GenEd Credits   | 19-20 |

| <b>Required</b> Course | Prerequisite(s)   |
|------------------------|---|
| PUBH 2110              | BISC 1005*, 1006*, 1007*, 1008*, 1111*, 1112*, or HONR 1033* ( <i>Biology</i> |
|                        | topics only)  |
| PUBH 2112              | PUBH 1101- Introduction to Public Health and Health Services (can be taken    |
|                        | concurrently)   |
| PUBH 3130              | ECON 1011- Principles of Economics I* (Microeconomics)                        |
| PUBH 3131              | PUBH 2142 - Introduction to Biostatistics for Public Health                   |
| PUBH 3133              | Restricted to Juniors and Seniors   |
| PUBH 3135W             | PUBH 1101- Introduction to Public Health and Health Services                  |
|                        | Restricted to Juniors and Seniors   |
| PUBH 4140W             | • PUBH 1101,  |
|                        | • PUBH 2110,  |
|                        | • PUBH 2112,  |
|                        | • PUBH 2142,  |
|                        | • PUBH 3130,  |
|                        | • PUBH 3131,  |
|                        | • PUBH 3135W,   |
|                        | Research Methods Selective, AND   |
|                        | • PUBH 3132 and/or PUBH 3133.   |
|                        | Restricted to Seniors only  |

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

\*These courses may also satisfy GenEd requirements.

# Public Health Required Core Requirements (34 credits)

The public health major curriculum constitutes 46 credits: 34 core credit credits and 12 elective credits offered through the GWSPH.

| Required Core Courses (31 Credits)                                   |  |         |  |  |  |
|--|--|---------|--|--|--|
| Course   | Course Title   | Credits |  |  |  |
| PUBH 1010  | First-Year Experience in Public Health                                     | 1       |  |  |  |
| PUBH 1101  | Introduction to Public Health and Health Services                          | 3       |  |  |  |
| PUBH 2110  | Public Health Biology  | 3       |  |  |  |
| PUBH 2112  | Principles of Health Education and Health Promotion                        | 3       |  |  |  |
| PUBH 2142  | Introduction to Biostatistics for Public Health                            | 3       |  |  |  |
| PUBH 3130  | Health Services Management and Economics                                   | 3       |  |  |  |
| PUBH 3131  | Epidemiology: Measuring Health and Disease                                 | 3       |  |  |  |
| PUBH 3132  | Health and Environment   | 3       |  |  |  |
| PUBH 3133  | Global Health and Development  | 3       |  |  |  |
| PUBH 3135W   | Health Policy  | 3       |  |  |  |
| PUBH 4140W   | Senior Seminar   | 3       |  |  |  |
| <b>Research Methe</b>  | ods selective – choose one (1) of the following 3-credit courses^:         |         |  |  |  |
| PUBH 3199  | Research Methods in Public Health  | 2       |  |  |  |
| EXNS 3111W     Exercise and Nutrition Science Research Methods     3 |  |         |  |  |  |
|  | earch methods courses will be considered with advanced approval by the Pro | gram    |  |  |  |
| Director   |  |         |  |  |  |
| Total Public Health Required Core Credits 34                         |  |         |  |  |  |

# **Public Health Guided Electives (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 Public Health Elective list or with advanced approval of the Program Director.

# **Concentration Requirements:**

| I. No Concentration:   |               |  |  |  |  |  |
|--|---------------|--|--|--|--|--|
| BS Public Health - No Concentration - Must Fulfill the Following Degree Requirements   |               |  |  |  |  |  |
| All General Education Requirements (GenEd)   | 19-20 Credits |  |  |  |  |  |
| <ul> <li>All Public Health Core Curriculum/Research Methods Requirements</li> <li>C- or better required in core Public Health courses</li> </ul>   | 34 Credits    |  |  |  |  |  |
| <ul> <li>Public Health Electives:</li> <li>Please see the "Guided Electives" worksheet for a list of approved courses</li> <li>C- or better required in Public Health Electives</li> </ul> | 12 Credits    |  |  |  |  |  |
| General Electives  | 54-55 Credits |  |  |  |  |  |
| Total Number of Credits  | 120           |  |  |  |  |  |

# II. Pre-Medical Professional (PMP) Concentration:

The pre-medical professional (PMP) concentration is comprised of two components: a set of required core courses and a set of additional recommended, though not required, courses. Please note that medical school requirements may vary, so please review program-specific admissions requirements, and consult with the pre-health advisor (prehealth@gwu.edu) as soon as possible. Talk with your Academic Advisor on how these courses can fit into your four-year plan.

|  | Pre-Medical Professional (PMP) Concentration Required Courses |         |  |  |  |         |  |  |  |
|--|---|---------|--|--|--|---------|--|--|--|
| Course   | Course Title  | Credits |  | Course   | Course Title   | Credits |  |  |  |
| BISC<br>1111 <sup>a,b</sup>                                | Intro Biology:<br>Cells &<br>Molecules*                       | 4       |  | BISC 3261<br>or<br>CHEM 3165   | Intro to Biochemistry or<br>Biochemistry I   | 3       |  |  |  |
| BISC<br>1112 <sup>a,b</sup>                                | Intro Biology:<br>The Biology of<br>Organisms                 | 4       |  | MATH 1220,<br>1221 <sup>b</sup> ,<br>1231 <sup>a,b</sup> , or<br>1232 <sup>a,b</sup> | Calculus with Precalculus I<br>(or higher level MATH)  | 3       |  |  |  |
| CHEM<br>1111 <sup>a,b</sup><br>CHEM<br>1112 <sup>a,b</sup> | General<br>Chemistry I<br>General<br>Chemistry II             | 4       |  | PHYS<br>$1011^{a,b}$ and<br>$1012^{a,b}$<br>or PHYS<br>$1021^{a,b}$ and              | General or University<br>Physics or University<br>Physics with Biological<br>Applications I and II | 8       |  |  |  |
|  |   | 4       |  | $1022^{a,b}$<br>or PHYS<br>$1025^{b}$ and<br>$1026^{b}$                              |  | 0       |  |  |  |
| CHEM<br>2151/2153  | Organic<br>Chemistry I and<br>Lab                             | 4       |  | PSYC 1001 <sup>a</sup><br>or SOC 1001  | General Psychology or<br>Intro to Sociology  | 3       |  |  |  |

| CHEM<br>2152/2154   | Organic<br>Chemistry II and<br>Lab | 4 |  |  |    |
|---|------------------------------------|---|--|--|----|
| Total Pre-Medical Professional (PMP) Concentration Requirements |                                    |   |  |  | 41 |

<sup>a</sup> Students who receive AP credit for these courses do not need to repeat them at GW. However, medical schools will expect that students have a minimum of 8 credit hours of upper level BISC coursework with lab components and may expect students to have a specific number of semesters/credits of CHEM coursework and advanced PHYS coursework. <sup>b</sup> These courses may also satisfy GenEd requirements

| Additional Courses Recommended for Pre-Medical Professionals |                                      |         |  |  |  |
|--|--------------------------------------|---------|--|--|--|
| Course   | Course Title                         | Credits |  |  |  |
| BISC 2202  | Cell Biology                         | 3       |  |  |  |
| BISC 2207/2208   | Genetics & Lab                       | 3-4     |  |  |  |
| BISC 2322  | Human Physiology                     | 3       |  |  |  |
| BISC 2337W   | Intro Microbiology                   | 4       |  |  |  |
|  | Additional Recommended Credits 13-14 |         |  |  |  |

| BS Public Health – PMP Concentration - Must Fulfill the Following Degree Requirements   |               |  |  |  |  |
|---|---------------|--|--|--|--|
| General Education Requirements (GenEd)  |               |  |  |  |  |
| Pre-Medical Professional (PMP) Concentration Requirements   | 41 Credits    |  |  |  |  |
| <ul> <li>All Public Health Core Curriculum/Research Methods Requirements</li> <li>C- or better required in core Public Health courses</li> </ul>  | 34 Credits    |  |  |  |  |
| <ul> <li>Public Health Electives</li> <li>Please see the "Guided Electives" worksheet for a list of approved courses</li> <li>C- or better required in Public Health Electives</li> </ul> |               |  |  |  |  |
| <ul> <li>General Electives</li> <li>General Electives total includes those additional courses recommended for pre-medical professionals, if taken</li> </ul>                              | 17-20 Credits |  |  |  |  |
| Total Number of Credits   | 120           |  |  |  |  |

\*Some of the PMP concentration requirements will also be counted as GenEd credits. Any of the 1000-level science courses required for the PMP concentration satisfy the Scientific Reasoning GenEd requirement, reducing total additional GenEd credits required to 16. MATH 1221, 1231, or 1232 satisfy both the PMP concentration math requirement and the Quantitative Reasoning GenEd requirement, further reducing total additional GenEd credits required to 13. Because MATH 1220 satisfies a PMP concentration requirement but not the Quantitative Reasoning GenEd requirement, PMP concentration students who take MATH 1220 must take an additional MATH or STAT GenEd course, bringing their total additional GenEd credits required to 16.

#### **Pre-Health Professionals (PHP) Concentration:** III.

The pre-health professionals (PHP) concentration is comprised of two components: a set of required core courses applicable to all pre-health professions and a set of additional required courses applicable to specific health care professions (Nursing, Physician Assistant, Physical Therapy, or Dentistry). If interested in a healthcare field outside of Medicine, Nursing, Physician Assistant, Physical Therapy, or Dentistry, students should work with the Pre-Health Advisor (prehealth@gwu.edu) to identify the best courses to take (in addition to the required core courses) most applicable to the health discipline of interest to the student. Please note that graduate and doctoral program requirements may vary, so please

review program-specific admissions requirements and consult with the pre-health advisor as soon as possible. Talk with your Academic Advisor on how these courses can fit into your four-year plan.

| Pre                         | Pre-Health Professionals (PHP) Concentration Required Core Courses |            |     |   |                                      |         |  |
|-----------------------------|--|------------|-----|---|--------------------------------------|---------|--|
| Course                      | Course Title   | Credits    |     | Course  | Course Title                         | Credits |  |
| BISC 1111 <sup>a,b</sup>    | Intro Biology:<br>Cells & Molecules                                | 4          |     | EXNS 1111                                       | Anatomy & Physiology<br>II           | 4       |  |
| BISC 1112 <sup>a,b</sup>    | Intro Biology: The<br>Biology of<br>Organisms                      | 4          |     | BISC 2336<br>and BISC<br>2337                   | Microbiology and<br>Microbiology Lab | 4       |  |
| CHEM<br>1111 <sup>a,b</sup> | General Chemistry<br>I   | 4          |     | MATH 1220, 1221 <sup>b</sup> ,                  | Calculus with<br>Precalculus I (or   | 3       |  |
| CHEM<br>1112 <sup>a,b</sup> | General Chemistry<br>II  | 4          |     | 1231 <sup>a,b</sup> , or<br>1232 <sup>a,b</sup> | higher-level MATH)                   | 3       |  |
| EXNS 1110                   | Anatomy &<br>Physiology I  | 4          |     | PSYC 1001 <sup>a</sup>                          | General Psychology                   | 3       |  |
| <b>Total Pre-He</b>         | alth Professionals (PI   | IP) Concer | ntı | ration Core Req                                 | uirements                            | 34      |  |

<sup>a</sup> Students who receive AP credit for these courses do not need to repeat them at GW. Students should check with specific graduate programs to assess whether there are minimum expectations for advanced coursework in BISC, CHEM, and/or MATH. <sup>b</sup> These courses also satisfy GenEd requirements.

| Pre-Health Professionals (PHP) Concentration Track-Specific Requirements (courses taken <u>in addition</u> to the PHP Concentration Required Core Courses) |                                      |         |  |                                 |                       |         |  |
|--|--------------------------------------|---------|--|---------------------------------|-----------------------|---------|--|
|  | Pre-Nursing Track                    |         |  | Pre-Physici                     | an Assistant (PA) Tra | ack     |  |
| Course   | Course Title                         | Credits |  | Course                          | Course Title          | Credits |  |
| EXNS<br>2119   | Introduction to Nutrition<br>Science | 3       |  | CHEM 2151/2153                  | Organic Chemistry I   | 4       |  |
| HSCI 2105  | Current Issues in<br>Bioethics       | 3       |  | CHEM 2152/2154                  | Organic Chemistry II  | 4       |  |
| PSYC<br>2013 <sup>b</sup>  | Developmental<br>Psychology          | 3       |  | BISC 3165 or<br>CHEM 3165       | Biochemistry I        | 3       |  |
| SOC 1001   | Introduction to Sociology            | 3       |  | BISC 2207/2208                  | Genetics and Lab      | 4       |  |
| TOTAL TR<br>CREDITS  | ACK-SPECIFIC                         | 12      |  | TOTAL TRACK-SPECIFIC CREDITS 15 |                       | 15      |  |
|  |                                      |         |  |                                 |                       |         |  |
| Pre-Ph   | ysical Therapy (PT) Ti               | rack    |  | Pre-                            | Dentistry Track       |         |  |
| Course   | Course Title                         | Credits |  | Course                          | Course Title          | Credits |  |
| PHYS<br>1011 <sup>a,b</sup>  | General Physics I                    | 4       |  | CHEM 2151/2153                  | Organic Chemistry I   | 4       |  |
| PHYS<br>1012 <sup>a,b</sup>  | General Physics II                   | 4       |  | CHEM 2152/2154                  | Organic Chemistry II  | 4       |  |
| PSYC<br>2013 <sup>b</sup>  | Developmental<br>Psychology          | 3       |  | BISC 3165 or<br>CHEM 3165       | Biochemistry          | 3       |  |
| TOTAL TRACK-SPECIFIC   |                                      | 11      |  | PHYS 1011 <sup>a,b</sup>        | General Physics I     | 4       |  |
| I U I AL I N   | CREDITS                              |         |  |                                 |                       |         |  |

|  | BISC 2207/2208,<br>2202, or 3212 | Genetics, Cell Biology,<br>or Immunology | 3-4   |
|--|----------------------------------|--|-------|
|  | TOTAL TRACK-S                    | PECIFIC CREDITS                          | 22-23 |

<sup>a</sup> Students who receive AP credit for these courses do not need to repeat them at GW. Students should check with specific graduate programs to assess whether there are minimum expectations for advanced coursework in PHYS. <sup>b</sup>These courses may also satisfy GenEd requirements.

| BS Public Health – Pre-Health Professionals (PHP) Concentration - Must Fulfill the Following  |                |  |  |  |  |
|---|----------------|--|--|--|--|
| Degree Requirements:  |                |  |  |  |  |
| General Education Requirements (GenEd)  | 10-16 Credits* |  |  |  |  |
| <ul> <li>Pre-Health Professionals (PHP) Concentration Requirements</li> <li>This includes PHP core courses <i>plus</i> PHP track-specific requirements</li> </ul> | 45-57 Credits  |  |  |  |  |
| All Public Health Core Curriculum/Research Methods Requirements   | 34 Credits     |  |  |  |  |
| C- or better required in core Public Health courses   |                |  |  |  |  |
| Public Health Electives   | 12 Credits     |  |  |  |  |
| <ul> <li>Please see the "Guided Electives" worksheet for a list of approved courses</li> <li>C- or better required in Public Health Electives</li> </ul>          |                |  |  |  |  |
| General Electives   | 1-19 Credits   |  |  |  |  |
| Total Number of Credits   | 120            |  |  |  |  |

\*Some of the PHP concentration core and track-specific requirements will also be counted as GenEd credits. Any of the 1000level science courses required for the PHP concentration core satisfy the Scientific Reasoning GenEd requirement, reducing total additional GenEd credits required to 16. MATH 1221, 1231, or 1232 satisfy both the PMP concentration core math requirement and the Quantitative Reasoning GenEd requirement, further reducing total additional GenEd requirements to 13 total. Because MATH 1220 satisfies a PMP concentration requirement but not the Quantitative Reasoning GenEd requirement, PMP concentration students who take MATH 1220 must take an additional MATH or STAT GenEd course, bringing their total additional GenEd credits required to 16. Students in the pre-nursing and pre-physical therapy tracks must take PSYC 2013, which satisfies 3 of the 6 Social Science GenEd required credits, reducing total additional GenEd credits required to 13 for students who take MATH 1220 to satisfy the PMP concentration core math requirement and to 10 for students who take MATH 1221, 1231, or 1232.

# **EXPECTATIONS OF STUDENTS/POLICIES**

- 1. Consult your GWSPH Undergraduate Program Advisor prior to the first term's course registration and in future terms as needed. Students are expected to consult a program advisor in all matters affecting the program of study, such as substitutions, or withdrawals.
- 2. Students following the PMP or pre-health concentrations must consult with the University Pre-Health advising team (<u>https://prehealth.gwu.edu/</u>) regarding pre-health expectations and procedures.
- 3. Students must earn a C- or higher in all courses required for the major (core and elective) to graduate with a BSPH major. All BSPH core and guided elective courses must be taken for a letter grade.
- 4. Students can double-count BSPH courses toward another major and/or minor's requirements only if the other program allows it.
- Students are responsible for reviewing, understanding, and following the policies and requirements as outlined in the GWSPH Undergraduate Student Handbook (<u>https://publichealth.gwu.edu/content/services-students</u>)and the University's Bulletin (<u>www.gwu.edu/~bulletin/</u>).
- 6. Students must earn a minimum of 120 total credits and satisfy all course requirements for the Public Health major (and concentrations, if applicable) as listed above.

7. Students must complete all BSPH core courses at GW. Students may complete up to 9 BSPH guided elective credits at another university in accordance with GW's transfer credit requirements, if the course(s) are pre-approved by the BSPH Program Director.

**Course Descriptions, program information, and registration** information can be found on the website: <u>http://publichealth.gwu.edu/academics\_and http://bulletin.gwu.edu/courses/PUBH/</u>.

# Milken Institute School of Public Health

# THE GEORGE WASHINGTON UNIVERSITY

#### PUBLIC HEALTH ELECTIVES, 2022-2023

# <u>Students may petition the BSPH program director for approval of a GW elective not listed below</u> *(syllabus must be provided).*

#### **AMERICAN STUDIES**

| AMST 3950 Topics: Narrative Medicine in A | erican History <i>only</i> 3 |
|---|------------------------------|
|---|------------------------------|

#### ANTHROPOLOGY

| ANTH 3503       | Psychological Anthropology    | 3 |
|-----------------|-------------------------------|---|
| ANTH 3504       | Illness, Healing, and Culture | 3 |
| ANTH 3513/3513W | Anthropology of Human Rights  | 3 |

#### **BUSINESS ADMINISTRATION**

| BADM 1004       | The Age of Globalization                  | 3 |
|-----------------|---|---|
| BADM 4101/4101W | Business Ethics and the Legal Environment | 3 |

#### BIOCHEMISTRY

| BIOC 3560 Diet, Health, & Longevity 3 |
|---------------------------------------|
|---------------------------------------|

#### **BIOLOGICAL SCIENCES**

| BISC 2450          | Organic Evolution     | 3 |
|--------------------|-----------------------|---|
| BISC 3450 or 3450W | Evolutionary Medicine | 3 |

### COMMUNICATION

| COMM 3179 | Sexual Communication | 3 |
|-----------|----------------------|---|
|-----------|----------------------|---|

#### **COMPUTER SCIENCE**

| CSCI 1011 | Introduction to Programming with Java   | 3 |
|-----------|---|---|
| CSCI 1012 | Introduction to Programming with Python | 3 |
| CSCI 1121 | Introduction to C Programming           | 3 |

#### **ECONOMICS**

| ECON 2151 Economic Development | 3 |
|--------------------------------|---|
|--------------------------------|---|

#### **EMERGENCY HEALTH SERVICES**

|   | EHS 2109 | Infectious Disease and Bioterrorism              | 3 |
|---|----------|--|---|
|   | EHS 2160 | Disaster Response Planning and Management        | 3 |
| Γ | EHS 3174 | Foundations of Emergency Health Services Systems | 3 |
| Γ | EHS 3175 | Community Risk Management and Safety in EHS      | 3 |
| Ī | EHS 4101 | Humanitarian Relief Operations                   | 3 |

### **EXERCISE & NUTRITION SCIENCES**

| EXNS 1114              | Community Nutrition                          | 3   |
|------------------------|--|-----|
| EXNS 1199              | Topics in EXNS: International Nutrition only | 3   |
| EXNS 2116              | Exercise and Health Psychology               | 3   |
| EXNS 2119              | Introduction to Nutrition Science            | 3   |
| EXNS 2122              | Food Systems in Public Health                | 3   |
| EXNS 2123              | Nutrition and Chronic Disease                | 3   |
| EXNS 3995 <sup>1</sup> | Undergraduate Research                       | 0-6 |

# GEOGRAPHY

| GEOG 1003 | Society and Environment             | 3 |
|-----------|-------------------------------------|---|
| GEOG 2104 | Introduction to Cartography and GIS | 3 |
| GEOG 2127 | Population Geography                | 3 |
| GEOG 2137 | Environmental Hazards               | 3 |
| GEOG 3105 | Techniques of Spatial Analysis      | 3 |
| GEOG 3106 | Intermediate GIS                    | 3 |

### **HEALTH & WELLNESS**

| HLWL 1106 | Drug Awareness  | 3 |
|-----------|-----------------|---|
| HLWL 1109 | Human Sexuality | 3 |

### HEALTH SCIENCES

| HSCI 2050 | Foundations of Health Equity   | 3 |
|-----------|--|---|
| HSCI 2101 | Psychological Aspects of Health (Residential only)                     | 3 |
| HSCI 2105 | Current Issues in Bioethics (students can receive BSPH elective credit | 3 |
|           | for either HSCI 2105 or PUBH 3151W, but cannot receive BSPH            |   |
|           | elective credit for both)  |   |
| HSCI 2110 | Disease Prevention and Health Promotion Concepts                       | 3 |
| HSCI 2118 | Global Women's Health  | 1 |
| HSCI 3100 | Applied Health Equity in Washington, DC                                | 1 |
| HSCI 4103 | Health Care Law/Regulation (students can receive BSPH elective credit  | 3 |
|           | for either HSCI 4103 or PUBH 3136, but cannot receive BSPH elective    |   |
|           | credit for both)   |   |

# HISTORY

| HIST 3363 | Race, Medicine, and Public Health | 3 |
|-----------|-----------------------------------|---|
|           | •                                 |   |

#### HONORS

|  | HONR 2047/2047W | Self and Society Seminar (Pediatric Ethics topic only) | 3 |
|--|-----------------|--|---|
|--|-----------------|--|---|

## INFORMATION SYSTEMS TECHNOLOGY MANAGEMENT

| ISTM 3119 | Introduction to Programming | 3 |  |
|-----------|-----------------------------|---|--|
|           |                             | , |  |

### ITALIAN

| ITAL 3300 Italian Literature & Culture- Pandemics in Italian Literature & Film <i>only</i> | TAL 3300 | Italian Literature & Culture- Pandemics in Italian Literature& Film only | 3 |
|--|----------|--|---|
|--|----------|--|---|

# PHILISOPHY

| PHIL 2124/2124W | Philosophies of Disability    | 3 |
|-----------------|-------------------------------|---|
| PHIL 2125/2125W | Philosophy of Race and Gender | 3 |
| PHIL 2281       | Philosophy of the Environment | 3 |

#### **POLITICAL SCIENCE**

| PSC 2240 | Welfare, Work, and Poverty | 3 |
|----------|----------------------------|---|
| PSC 2367 | Human Rights               | 3 |

# PSYCHOLOGY

| PSYC 3128 | Health Psychology              | 3 |
|-----------|--------------------------------|---|
| PSYC 3199 | Substance Abuse and Addictions | 3 |

# **PUBLIC HEALTH**

| PUBH 1102              | History of Public Health                             | 3   |
|------------------------|--|-----|
| PUBH 2113              | Impact of Culture Upon Health                        | 3   |
| PUBH 2114              | Environment, Health and Development                  | 3   |
| PUBH 2117              | Service Learning in Public Health                    | 3   |
| PUBH 3115              | Global Health and Human Rights                       | 3   |
| PUBH 3116              | Global Health Systems Performance                    | 3   |
| PUBH 3136              | Health Law   | 3   |
| PUBH 3150              | Sustainable Energy and Environmental Health          | 3   |
| PUBH 3151W             | Current Issues in Bioethics (or HSCI 2105, not both) | 3   |
| PUBH 3199              | Various Topics in Public Health                      | 1-3 |
| PUBH 3201              | Introduction to Bioinformatics                       | 3   |
| PUBH 3202              | Introduction to Genomics                             | 3   |
| PUBH 3995 <sup>1</sup> | Undergraduate Research                               | 1-6 |
| PUBH 4199 <sup>1</sup> | Independent Study                                    | 1-6 |
| PUBH 4201              | Practical Computing                                  | 3   |
| PUBH 4202              | Bioinformatics, Algorithms, and Data Structures      | 3   |

# SOCIOLOGY

| SOC 2102 | Techniques of Data Analysis  | 3 |
|----------|--|---|
| SOC 2181 | Demography + The Social World  | 3 |
| SOC 2189 | Special Topics in Criminal Justice: Rethinking DC Youth & Policing <i>only</i> | 3 |

# STATISTICS

| STAT 2118       | Regression Analysis                 | 3 |
|-----------------|-------------------------------------|---|
| STAT 2183/2183W | Intermediate Statistics Lab/Package | 3 |

# SUSTAINABILITY

| SUST 1001 | Introduction to Sustainability | 3 |
|-----------|--------------------------------|---|
| SUST 3003 | World on a Plate               | 3 |

# WOMEN'S, GENDER, AND SEXUALITY STUDIES

| WGSS 3170 | Special Topics in Women's, Gender, and Sexuality Studies: | 3 |
|-----------|---|---|
|           | Writing/Righting Black Girls' and Women's Health only     |   |

\*NOTE: Courses offered online may only be taken in the summer term

<sup>1</sup>EXNS/PUBH 3995 and PUBH 4199: BSPH majors may apply up to 6 credits of Undergraduate Research and/or Independent Study toward their major elective requirement. All of these courses MUST be taken for a letter grade and cannot be taken Pass/No Pass