The Public Health Science program includes a strong curriculum in science and public health courses, such as biostatistics, epidemiology, environmental health, and global health. Students will have the opportunity for individual exploration in public health through electives, laboratory experiences, optional internships, and a culminating interdisciplinary capstone course. As a collaborative degree involving multiple scholarly disciplines, courses offered by this program may be found under the following acronyms: PHSC, SPHL, HLTH, KNES, EPIB, MIEH and HLSA.

The degree effectively prepares students to pursue exciting careers in allied health, medical, and public health fields as well as post-baccalaureate professional and academic degrees.

The degree is offered at both the College Park and Shady Grove campuses.

### Program Objectives

The Public Health Science Bachelor of Science degree is an interdisciplinary program designed to provide students with the educational foundation required to effectively address local, national and global issues within the public health arena.

### Program Learning Outcomes

1. Discuss the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society.
2. Use basic public health concepts, methods, and tools for data collection and analysis.
3. Identify the major health-related needs and concerns of populations and formulate basic processes, approaches, and interventions as possible solutions.
4. Describe the underlying science of human health and disease including opportunities for promoting and protecting health across the lifespan.
5. Examine the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities.
6. Demonstrate the fundamental concepts and features of project implementation, including planning, assessment, and evaluation.
7. Compare and contrast the fundamental characteristics and organizational structures of the health systems of the United States and other countries.
8. Characterize the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public policy.
9. Illustrate the basic concepts of public health-specific writing and communication.
10. Interpret and synthesize scientific knowledge to propose evidence-based approaches and solutions to public health problems.

### Requirements

For full details of degree requirements, please view the Shady Grove curriculum online at: http://sph.umd.edu/department/phssg/shady-grove-curriculum.

In order to graduate with a Bachelor of Science degree in Public Health Science, students must complete 120 credits, 74 of which are specific to the Public Health Science degree. Students must earn a minimum grade of C- or higher in all Public Health Science major-required coursework.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH120</td>
<td>Elementary Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>BSCI170 &amp; BSCI171</td>
<td>Principles of Molecular &amp; Cellular Biology and Principles of Molecular &amp; Cellular Biology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BSCI201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BSCI202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM131 &amp; CHEM132</td>
<td>Chemistry I - Fundamentals of General Chemistry and General Chemistry I Laboratory</td>
<td>4</td>
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<tr>
<td>CHEM231 &amp; CHEM232</td>
<td>Organic Chemistry I and Organic Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>BSCI222</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BSCI223</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

### Public Health Science Foundation Courses

- HLTH366 Behavioral and Community Issues in Public Health 3
- PHSC300 Foundations of Public Health 3
- EPIB301 Epidemiology for Public Health Practice 3
- EPIB315 Biostatistics for Public Health Practice 3
- HLSA300 Introduction to Health Policy and Services 3
- MIEH300 A Public Health Perspective: Introduction to Environmental Health 3
- MIEH400 Introduction to Global Health 3
- KNES320 Physiological Basis of Physical Activity and Human Health 4
- PHSC415 Essentials of Public Health Biology: The Cell, The Individual, and Disease 3
- PHSC497 Public Health Science Capstone 3

### Public Health Science Options Courses

Select from the following:

- EPIB330 The Coming Plague: Public Health Perspectives
- EPIB400 Obesity: An Epidemiologic Perspective
- FGSM320 Public Health Policy
- FMSC310 Maternal, Child and Family Health
- FMSC460 Violence in Families
- HLTH371 Communicating Safety and Health
- HLTH377 Human Sexuality
- HLTH424 Lesbian, Gay, Bisexual & Transgender Health
- HLTH434 Introduction to Public Health Informatics
- HLTH460 Minority Health
**General Scholarship and Financial Assistance**

The Office of Student Financial Aid administers all types of federal, state, and institutional financial assistance programs, and in cooperation with other university offices, participates in the awarding of scholarships to deserving students. For information, go to: https://www.financialaid.umd.edu/.

The School of Public Health also provides some scholarships for undergraduate students in need, including the Jerry P. Wrenn Endowed Scholarship, the School of Public Health Student Emergency Scholarship, the SPH Scholarship Fund, and TerpStart Scholarships. To learn more about School of Public Health scholarships, go to: http://sph.umd.edu/content/financing-your-degree.

Additional information on UMD-related financial resources can be found at http://sph.umd.edu/content/student-resources-and-services, by clicking the “Financial/Resource Assistance” link.

**Public Health Science Scholarships**

The Public Health Science Program offers two scholarships specifically for Public Health Science students. These scholarships include the Barbara and Carl Alving Endowed Research Award in Public Health Science and the Whitlark Endowed Scholarship in Public Health Science. More details regarding these scholarships are available at the Public Health Science Scholarship website (http://sph.umd.edu/department/phs/scholarship-opportunities-public-health-science-students).

**Awards and Recognition**

Each spring, the Public Health Science program recognizes a select few exceptional undergraduates at the annual School of Public Health Honors Convocation.

**Four Year Plan**

Roadmaps for all four-year plans can be found here (http://4yearplans.umd.edu). Select the College of your major to find the corresponding roadmap.

For more information on developing a four-year academic plan, please refer to the Student Academic Success-Degree Completion Policy (https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-advising) section of this catalog.

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### Admissions

**Advising**

Major academic advising is mandatory for Public Health Science students at Shady Grove each semester. To schedule an academic advising appointment with our advising team, visit: https://appointments-sphl.umd.edu/ramonline

The program advisors coordinate closely with the School of Public Health Center for Academic Success and Achievement as well as the in-house Career Center and the Campus Career Center. Students interested in pursuing medicine and some allied health fields should also consult the Allied Health Advising Center.

### Opportunities

**Internships and Research Experiences**

Internships and research experiences are strongly encouraged. Students participate in experiences both on and off campus. Public Health Science internship and independent study coordinator, Nancy Smith (nsmith10@umd.edu), can be contacted regarding the opportunity to complete an internship or research experience for credit.