PUBLIC HEALTH SCIENCE MAJOR AT SHADY GROVE

The Universities at Shady Grove
University of Maryland
Public Health Science Program
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Shady Grove: http://go.umd.edu/phsc-sg (https://sph.umd.edu/undergraduate-degrees/bs-public-health-science-shady-grove/)

Director: Jennifer Hodgson, Ed.D., MPH

The Public Health Science program includes a strong curriculum in science and public health courses, such as biostatistics, epidemiology, environmental health, and health policy. 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.
11. Critically analyze the impact racism has on public health and reflect on what it means to be anti-racist.

REQUIREMENTS

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

Course	Title	Credits
Scientific Foundation Courses		
MATH120	Elementary Calculus I	3
BSCI170 & BSCI171	Principles of Molecular & Cellular Biology and Principles of Molecular & Cellular Biology Laboratory	4
BSCI201	Human Anatomy and Physiology I	4
BSCI202	Human Anatomy and Physiology II	4
CHEM131 & CHEM132	Chemistry I - Fundamentals of General Chemistry and General Chemistry I Laboratory	4
CHEM231 & CHEM232	Organic Chemistry I and Organic Chemistry Laboratory I	4
BSCI222	Principles of Genetics	4
BSCI223	General Microbiology	4
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
PHSC450	Addressing Social and Structural Inequities Through Public Health (Interdisciplinary Applications of Public 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 [1]		**12**
Total Credits		**74**

[1] The Public Health Science option courses build upon the Scientific and Public Health Science Foundation courses. The option courses are 300 and 400 level courses primarily offered within the School of Public Health. By choosing from these courses, students have an

opportunity to customize their program. Students are encouraged to choose courses that best align with a particular career goal. Please visit the PHSC website for the current list of approved options: https://sph.umd.edu/department/phs/college-park-curriculum-post-spring-2018 (https://sph.umd.edu/department/phs/college-park-curriculum-post-spring-2018/)

GRADUATION PLANS

Click here (http://sph.umd.edu/content/four-year-plans/) for roadmaps for graduation plans in the School of Public Health.

Additional information on developing a graduation plan can be found on the following pages:

- http://4yearplans.umd.edu
- the Student Academic Success-Degree Completion Policy (https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-advising/#success) section of this catalog

ADVISING

Major academic advising is mandatory for Public Health Science students at Shady Grove each semester. Academic advising is by appointment only and can be scheduled on our website (https://sph.umd.edu/academics/departments-units/public-health-science/shady-grove-public-health-science/advising-public-health-science-shady-grove/).