

ONE HEALTH, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

The minor in One Health will consist of four core courses (12 credits) and nine credits of supporting courses from a variety of disciplines. This course is open to all SCIENCE MAJORS. Students that are accepted in the minor, will consult with the coordinator such that the minor is completed in time. Substitution of supportive courses will be an option as determined by the coordinator to all the students to complete the minor on time.

What is One Health?

One Health is a multidisciplinary approach integrating human medicine, veterinary medicine, and environmental science to optimize the health of people, animals, plants, and ecosystems. Its holistic methodology recognizes that these three areas of study are intimately intertwined. One Health training allows students to think dynamically and globally about how health is affected, diseases are transmitted, and environment plays a role in disease.

You Might Like this Program If...

- You are dedicated to improving the lives of humans and animals
- You are interested in the interdependencies that shape our health and the environment
- You find passion promoting health on a local, national, or global scale
- You value interdisciplinary thinking in solving the world's big problems

Program Requirements

Requirement	Credits
Requirements for the Minor	21

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Some courses have prerequisites which need to be completed before taking the course.

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
VBSC 340	Introduction to Human and Veterinary Public Health	3
VBSC 444	Epidemiology of Infectious Diseases	3
VBSC 455	One Health	3
VBSC 456	Case Studies in Global One Health	3

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better

Select 0-9 credits from the following: 0-9

ANSC 419W	Applied Animal Welfare
BBH 302	Diversity and Health
BMB 464	Molecular Medicine
BMH 490	Bioethics and Medical Humanities Capstone Course
BIOL 415	Ecotoxicology
CED 442	Changing Food Systems: Comparative Perspectives
ENT 450	Medical Entomology
ERM 430	Air Pollution Impacts to Terrestrial Ecosystems
ENVSE 450	Environmental Health and Safety
FDSC 408	Food Microbiology
FOR/WFS 430	Conservation Biology
GEOG 436	Ecology, Economy, and Society
GEOSC 420	Paleobotany
MICRB 412	Medical Microbiology
NUTR 430	
SOC 423	Social Demography

Select 0-3 credits from the following: 0-3

VBSC 403H	Principles of Animal Disease Control
VBSC 402W	Biology of Animal Parasites
VBSC 409	Wildlife Diseases

Select 0-3 credits from the following: 0-3

VBSC 418	Bacterial Pathogenesis
VBSC 435	Viral Pathogenesis

Select 0-3 credits from the following: 0-3

VBSC 430	Principles of Toxicology
VBSC 431	Environmental Toxicology

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

University Park

Jennifer Koehl, Ph.D., MPS

Veterinary and Biomedical Sciences Undergraduate Program Coordinator,
One Health Minor Coordinator, Assistant Teaching Professor
108E Animal, Veterinary and Biomedical Sciences Building
University Park, PA 16802
jzk335@psu.edu

Careers Paths

The One Health minor offers a new perspective to approach your other fields of study. With this minor, you can build a career that supports the interdependent relationships between humans and animals. You can pursue jobs in fields such as animal science, biology, environmental studies, food science, nursing, nutrition, pandemic prevention and response, public health, toxicology, and veterinary and biomedical sciences.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN ONE HEALTH (<https://agsci.psu.edu/academics/undergraduate/minors/one-health/>)

Opportunities for Graduate Study

The One Health approach is adopted throughout veterinary, human, and environmental graduate curricula. Many graduate opportunities exist: Biomedical and comparative medicine research, veterinary science and medicine, public health, emergency management, public health preparedness, sustainability, and global food security. In addition, Penn State has the One Health Microbiome Center which offers multiple graduate degrees. The Center fosters long-term working relationships while simultaneously providing infrastructure and resources to support transformative, interdisciplinary microbiome scholarship locally, nationally, and worldwide.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (<https://agsci.psu.edu/research/impacts/themes/one-health/>)

Contact

University Park

DEPARTMENT OF VETERINARY AND BIOMEDICAL SCIENCES
Animal, Veterinary and Biomedical Sciences Building
University Park, PA 16802
vetbiomedsci@psu.edu

<https://vbs.psu.edu/about/contact> (<https://vbs.psu.edu/about/contact/>)