

ENVIRONMENTAL HEALTH SCIENCE AND SUSTAINABILITY, BACHELOR OF SCIENCE (B.S.)

The Environmental Health Science and Sustainability program offers the Bachelor of Science degree. Established in the early 1970's, the program is currently the state's oldest accredited program and one of only 30 such programs in the United States accredited by the National Environmental Health Science and Protection Council. The program includes extensive study of the physical, chemical and biological threats to human health and focuses on both engineered barriers and behavioral changes required for protecting and enhancing human health. The program includes general education and support courses in biology, chemistry, and mathematics, plus a variety of environmental health courses dealing with air quality, water quality, wastewater disposal and treatment, hazardous and solid waste management, risk assessment and epidemiology, industrial hygiene, control of disease vectors, food hygiene, radiological health, environmental health program planning and law, and toxicology. During upper division study, the student must complete three credit hours of supervised field experience with appropriate agencies, industries, consulting companies, etc. Also, cooperative education opportunities are available to all students who may wish to gain experience in addition to credit hours.

Eastern Kentucky University's Environmental Health Science and Sustainability graduates are qualified for positions with federal, state, and local government departments of environmental health, as well as public health protection agencies such as the United States Public Health Service, the Environmental Protection Agency, Food and Drug Administration, Department of Energy, and Occupational Safety and Health Administration. Graduates are also qualified for employment in private industry and environmental consulting firms. This work may include quality control, industrial hygiene and safety, loss control and risk assessment, or many other facets of environmental health consultation. The demand for qualified environmental health practitioners is currently high and exceeds the number of graduates from accredited programs and projected to increase over the next decade.

Progression Criteria

A student majoring or minoring in environmental health science and sustainability must achieve a grade of "C"/2.0 or better in all EHS and supporting courses.

Program Requirements

CIP Code: 51.2202

Summary Checklist for General Education

Code	Title	Hours
Element 1		
A: Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3
B: Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3

C: Oral Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3
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Element 2

Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/)		3
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Element 3

A: Arts (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)		3
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B: Humanities (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)		3
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Element 4

Natural Sciences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/)		6
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Element 5

A: Historical Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)		3
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B: Social Behavioral Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)		3
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Element 6

Diversity of Perspectives Experiences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/)		6
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Total Hours		36
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Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

Major

Code	Title	Hours
University Graduation Requirements		
General Education		36
<i>Student Success Seminar</i>		
H50 100	Student Success Seminar (waived for transfers with 30+ hrs.)	1

Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)

Major Requirements

<i>Core Courses</i>		
EHS 230	Recreational Health	3
EHS 280	One Health: Global Environmental Public Health	3
EHS 300W or EHS 300	Water and Health Water and Health	4
EHS 335	Hazardous and Solid Waste Management	3
EHS 340	Total Worker Health Principles	3
EHS 345	Applied Total Worker Health	4
EHS 360	Air Quality & Climate Change	4
EHS 370	Environmental Disease Detectives: Epidemiology	3
EHS 380	Food Security and Sanitation	3
EHS 425	One Health: Planning to Practical Application	3
EHS 440	Environmental and Industrial Toxicology	3
EHS 460	Healthy Housing and Sustainability	3

EHS 463	Field Experience in Environmental Health	3
EHS 485	Life After College: The Professional	1
EHS 510	Radiological Health and Safety	3
EHS 530	Emerging and Re-emerging Infectious Diseases	3
<i>Supporting Course Requirements</i>		
BIO 111	Cell and Molecular Biology (Element 4) ^G	
BIO 308	Human Anatomy and Physiology II	3
BIO 320	Principles of Microbiology	4
or MLS 209 & MLS 211	Microbiology for Health Sciences and Medical Microbiology Laboratory	
CHE 111	General Chemistry (Element 4) ^G	
CHE 111L	General Chemistry Lab I (Element 4) ^G	
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
CHE 361 & 361L	Organic Chemistry I and Organic Chemistry Lab I	4
GEO 100	Regions and Nations of the World	3
GEO 353	Geographic Information Systems	3
PHY 131	College Physics I	5
STA 215	Introduction to Statistical Reasoning	3
Choose from one of the following: (Element 2)		
MAT 120	Trigonometry ^G	
MAT 122	Precalculus Mathematics ^G	
MAT 211	Applied Calculus ^G	
<i>Free Electives</i>		
Choose from 5 hours of free electives		5
Total Hours		120

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Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

A minimum score of 22 on the mathematics portion of the ACT or 530 on the mathematics portion of the SAT.