



# ENVIRONMENTAL SCIENCE

**Prepare to become a leader through Heritage University's Environmental Science program.**

If you are passionate about the environment and how we can interact with it positively so that it remains an asset for future generations, environmental science is an excellent career path. With two degree options, a Bachelor of Arts in Environmental Studies and a Bachelor of Science in Environmental Science, you will be able to direct your studies to move you toward your ultimate academic and career goals. Moreover, you will complete your studies using professional research equipment both in the field and Heritage's state-of-the-art laboratories.





## DEGREE OFFERINGS

**ASSOCIATE OF ARTS, A.A.**  
Natural Resources

**BACHELOR OF ARTS, B.A.**

**Environmental Studies**

**Specialization in:**

Natural Resources

Forestry

Business Administration

Fisheries

**BACHELOR OF SCIENCE, B.S.**

**Environmental Science**

Chemistry

Natural Resources

## ABOUT OUR PROGRAM

The Environmental Science program at Heritage University prepares students for careers that deal with complex environmental issues like air and water quality, conservation, watershed management, and natural resources planning. Emphasizing biology, chemistry and geology, the program examines Earth's ecosystems, climate changes and effects on the environment by human activities. You will learn about and work on projects with local environmental significance as well as global impacts. For example, you could conduct water quality studies in areas affected by agriculture, study the health of salmon and lamprey in the Columbia River Basin, or work with biochar on Heritage's on-campus research farm to find ways to improve soil conditions for agriculture without polluting nearby wetlands and groundwater.

## TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK)

The people who have lived on the lands for generations have knowledge and experiences that are valuable. Heritage has integrated Traditional Ecological Knowledge (TEK) into its Environmental Science and Studies curriculums through partnerships with the Yakama Nation and other tribes of the Pacific Northwest. Classes like the People of the Big River field course bring together multiple generations to explore environmental issues from both scientific and cultural perspectives.

To get started on your environmental science career today, visit us at [heritage.edu/environmental-studies](https://heritage.edu/environmental-studies) or call (509) 865-0440.



SCAN FOR MORE  
INFORMATION



## ALUMNI EMPLOYERS

Yakama Nation Fish and Wildlife

Yakama Nation Department of Natural Resources

Bureau of Indian Affairs

Washington State Department of Fish and Wildlife

Pacific Northwest National Laboratories

AgroFresh



## EXPERIENCES BEYOND THE NORM

### GRADUATE STUDIES

Washington State University

Montana Tech

University of Oregon

University of Washington

### CAREERS

Fisheries Biologist

Natural Resources Manager

Quality Control Technician

Research and Development Lab Technician

Soil Scientist

Wildlife Biologist

Researcher

Agricultural Scientist

All Environmental Science and Studies students complete at least one, and in most cases, two or more paid summer research projects. You will work hands-on with researchers at professional laboratories and leading research institutions. Our students have completed air and water quality studies in partnership with the EPA, assisted NASA in mapping regional changes to naturally occurring plant materials, examined salmon DNA, completed genetic studies on insects, and researched renewable energy sources.

Plus, our international partnerships mean you could conduct environmental research in the jungles of Costa Rica through the Costa Rica International Research Experience or study water quality and land use with the Ngäbe-Buglé indigenous people of Panama.

**“The Environmental Science program gave me a great foundation upon which to build my career.**

I completed interesting and meaningful research, networked with academic and scientific leaders, and was well prepared for graduate studies. I love that I got a world-class education right here at home.”

- Daylen Isaac, *Statistician, Yakama Nation Fisheries*





## SAMPLE COURSE GUIDE FOR ENVIRONMENTAL STUDIES

Note: Courses in bold are part of the GENERAL UNIVERSITY COURSE REQUIREMENTS. This is a suggested course guide and may change as needed.

FRESHMAN YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
<b>UNIV 101</b>	<b>Foundations for Success</b>		2	<b>ENG 102</b>	<b>English Composition II</b>		3
<b>ENG 101</b>	<b>English Composition I</b>		3	HIS 102W	World Civilization		3
ENSC 101/L	Intro to Environmental Science + Lab		4	ENSC 102/L	Intro to Environmental Science II + Lab		4
<b>MATH 212</b>	<b>Calculus</b>		5	MATH 221W/L	Intro to Statistics + Lab		4
			14				14

SOPHOMORE YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
BIOL 110/L	General Biology I + Lab		4	BIOL 111/L	General Biology II + Lab		4
CHEM 110/L	General Chemistry I + Lab		4	CHEM 111/L	General Chemistry I + Lab		4
ENSC 322W or ENSC 318 W	Environmental Literature/Environmental History		3	<b>LANGUAGE</b>			4
<b>Phys 101/L</b>	<b>General Physics I + Lab</b>		4	<b>PHIL 210</b>	<b>Logic and Critical Reasoning</b>		3
			15				15

JUNIOR YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
CHEM 305/L	Survey of Organic Chemistry + Lab		4	CHEM 331/L	Environmental Chemistry		5
ENSC 321	GIS		3	ENSC 380/L	Introduction to R + Lab		4
FOR 115/L or FISH 110/L	Intro to Forestry + Lab/Intro to Fisheries + Lab		4	BIOL 214/L or BIOL 220/L or BIOL 235/L	Botany + Lab/ Principles of Microbio. + Lab/ Zoology + Lab		4
ENSC 365/L	People of the Big River Field Class + Lab		4	ENSC 305/L	General Ecology + Lab		4
			15				17

SENIOR YEAR FIRST SEMESTER			Credits	SECOND SEMESTER			Credits
ENSC 496 or ENSC 497W 2-6	Research Experience/ Senior Thesis		2-6	ENSC 340	Fundamentals of Hydrology		3
ENSC 409	Seminar II 1		1	PHSC 321/L	Principles of Geology + Lab		3
BIOL 214/L or BIOL 220/L or BIOL 235/L	Botany + Lab/ Principles of Microbio. + Lab/ Zoology + Lab		4	ENSC 350 or ENSC 355 or ECON 341	Environmental Law and Justice/ Environmental Public Policy/Natural Resource Economics		4
ENSC 440W	Environmental Issues and Ethics		3	<b>ART</b>	<b>Fine Art 1</b>		3
POSC 101 or ECON 201	Intro to Political Science/ Intro to Microeconomic		3	ENSC or BIOL Upper Division	ENSC or BIOL class + Lab		4
			13-17				17

**TOTAL: 120-124 CREDITS**