

# Environmental Science B.S.

## Advising Major Guide for Huxley on the Peninsulas

### Why should I consider Environmental Science?

Are you excited by how natural systems function? Do you want to solve the problems of the natural environment created by human activities? Do you love the sciences and scientific inquiry? Then Environmental Science is for you.

### What is the study of Environmental Science?

Physical, chemical, biological and quantitative aspects of natural systems. The knowledge of how natural systems work is applied to solving problems largely created by human activities. Often these problems are represented by disturbances in the functioning of natural systems.

Humans are altering their own life-support systems – the air, water, and soil. Scales of disturbances range from the molecular and cellular to individuals, populations, ecosystems, and regional and global levels.

The Environmental Science major will acquire the scientific and problem solving skills needed to conserve and restore the natural environment.

Students of Environmental Science can go directly into an environmental science career or on to graduate school to further their study.

### Contact information

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### Sample Career Fields

Wildlife biologist	Environmental Scientist	Park Ranger	Water Resources Specialist
Naturalist	Fisheries Biologist	Aquatic Toxicologist	Environmental Chemist
Endangered Species Biologist	Marine Biologist	Wetlands Ecologist	Soil Conservation Specialist
Environmental Inspector	Safety and Health Specialist	Research Technician	

## WHAT SHOULD YOU BE DOING? HAVE A PLAN? HERE IT IS. . .

Huxley Pre-major Freshman & Sophomore Year	Huxley Major Junior Year	Huxley Major Senior Year
<ul style="list-style-type: none"> <li>Visit with Program Manager for Huxley on the Peninsula for a two year pre-major plan.</li> <li>Complete Associate Transfer Degree.</li> <li>Complete Huxley Preparatory Coursework while earning Associate Transfer Degree.</li> <li>Get involved in environmental issues and groups. Volunteer for environmental organizations.</li> <li>Apply to Western Washington University Extended Education and Huxley College on the Peninsula.</li> </ul>	<ul style="list-style-type: none"> <li>Meet with Program Manager to complete your Plan of Study.</li> <li>Meet with the Program Manager and discuss:               <ul style="list-style-type: none"> <li>electives</li> <li>internships/senior project</li> <li>career vs. graduate education</li> </ul> </li> <li>Take core courses Fall quarter: ESTU 304, ESCI 325, plus other</li> <li>Research careers and graduate education</li> <li>Plan and apply for internship/senior project by the end of Spring quarter.</li> </ul>	<ul style="list-style-type: none"> <li>Complete internship/senior Project</li> <li>Meet with Program Manager to refine Plan of Study.</li> <li>For graduate school, take GRE exam and apply to graduate programs.</li> <li>Two quarters before graduation, meet with Program Manager and faculty advisor for Major Evaluation.</li> <li>For Spring Graduation, apply by first week of December.</li> </ul>

### Applying as an Environmental Science Major

Once you have completed or are completing an Associate Transfer Degree **and** required preparatory courses, fill out a Western Washington University *Extension Undergraduate Application* **and** a Huxley College of the Environment *Extension Program Application*. Applications are due by April 1. Contact the Program Manager, Nancy Bluestein-Johnson for applications or [http://admissions.wwu.edu/transfer/x\\_apply.html](http://admissions.wwu.edu/transfer/x_apply.html) for Western's Extension Application. The Huxley College application, also, requires a brief essay and a list of relevant experience.

## Environmental Science Major Overview: 85 credits

### Required Preparatory Courses:

Chemistry 161, 162, and 163	<i>General Chemistry I,II and III</i>	15 credits
Biology 204, 205, and 206	<i>Biology Series</i>	15 credits
Math 124	<i>Calculus</i>	5 credits
Geography/Geology	<i>Physical Geography or Geology</i>	4-5 credits
Economics 202	<i>Microeconomics</i>	4-5 credits
Political Science	<i>Any Political Science Course</i>	5 credits
<b>Plus completion of Associate Transfer Degree</b>		

### Huxley Core Requirements:

**One Course from each of these two categories: 8 credits**

#### **Environmental Policy:**

ESTU 304 Environment and Resource Policy (4)  
ESTU 320 Explorations in Environmental Studies (4)

#### **Environmental History, Philosophy, Ethics:**

ESTU 305 Environmental History and Ethics (4)

#### **Approved Capstone Course: 5 credits**

ESCI 436 Environmental Impact Assessment

#### **One from the following: 10 – 15 credits minimum**

ESCI 498a Senior Thesis (10-15)  
ESCI 498b Internship (10-15)  
ESCI 498c Senior Project (10-15)

#### **Chemistry: 5-10 credits**

CHEM 251 Elementary Organic Chemistry(5) **or**  
CHEM 351, 352, and 354 (10 credits)

#### **Ecology: 3 credits**

ESCI 325 Fundamentals of Ecology (3)

#### **Biostatistics: 5 Credits**

ESCI 340 Biostatistical Analysis (5)

#### **Large-scale systems: 6 credits:**

ESCI 321/322 Oceanography (6)

#### **Lecture/Lab Courses: 10 credits:** Choose two of the following:

ESCI 361a, b Water Quality /Lab (3, 2)                      ESCI 407 Forest Ecology (5)  
ESCI 328 Intro to Ecosystem Management (5)                      ESCI 429 Stream Ecology (5)

#### **Electives:**

Other lecture/lab classes not taken in the above category and/or:

ESCI 392 Intro to Global Changes (3)                      ESTU 369 Introduction to Planning (3)  
ESCI 329 Energy and Environment (3)                      ESTU 445 Puget Sound Research (3)  
ESCI 432 Topics in Marine Ecology (4)                      ESTU 466 US & WA Environmental Regulations (4)  
ESCI 439 Conservation of Biological Diversity (4)                      EGEO 350 Introduction to GIS  
ESTU 417 Introduction to Grant Writing (1)

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### Resources

Huxley Website: <http://www.ac.wvu.edu/~huxley/>  
Huxley College Advising Page: <http://www.ac.wvu.edu/~huxley/advising/>  
Revised for Huxley on the Peninsula

***This document has been created for advising purposes only. Please contact the Program Manager for major and/or graduation requirements.***