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## WHY ENVIRONMENTAL SCIENCE AND STUDIES AT WASHINGTON COLLEGE?

Our location—on the Chester River and in the Chesapeake Bay watershed—is the setting of your hands-on environmental education. You will have direct access to the nation's largest estuary and its watershed, history, culture, people, and ongoing environmental challenges. You will be immersed through small classes that offer field experiences here and abroad using state-of-the-art labs and equipment or by answering your own questions through research opportunities. Get ready to examine the complexity of environmental issues that interest you!

## MAJOR IN ENVIRONMENTAL SCIENCE

After you take core science classes, you will choose from an array of environmental science courses, including wetlands ecology, climate change, energy & the environment, and marine conservation. You will learn to design research projects, and collect, analyze and interpret field and lab data.

## MAJOR IN ENVIRONMENTAL STUDIES

You can choose environmental courses ranging from art and ethics to economics and policy, complemented with a small core of environmental science classes. Through this interdisciplinary coursework, you will critically analyze and investigate solutions to regional and global environmental issues.



## OPPORTUNITIES ABROAD

You can participate in our credit-bearing summer programs in:

- **Ecuador** – Beginning in Quito, you'll immerse yourself in Ecuadorian cultures and examine environmental challenges affecting the country. You'll visit indigenous people in the Andes highlands and explore cloud forests and volcanoes. In the Amazon Rainforest, you'll travel by boat and on foot to discover this fascinating ecosystem. Off-shore in the Galápagos Islands, you'll study the remarkable diversity and uniqueness of species that compelled Charles Darwin's Theory of Evolution.
- **Bermuda** – Based at the Bermuda Institute of Ocean Sciences (BIOS) you'll examine the complex ecology of the Bermuda Islands and coral reef ecosystems, the impact that humans have had on their natural history, and current environmental concerns and proposed solutions. You'll participate in snorkeling trips to coral reef formations, visit cave ecosystems, and immerse yourself in Bermuda's history.



## CHESAPEAKE SEMESTER

Each fall, a small group of students have an immersive semester studying the history, science, culture and economy of the 64,000-square-mile Chesapeake Bay Watershed by getting out into it and becoming part of it. You will take what you've learned in the Chesapeake and apply it in Guatemala and Belize, exploring the shared challenges and solutions with an entirely different culture and ecosystem.

## DUAL-DEGREE PROGRAM

In 5 years, qualified students can earn their bachelor's degree from Washington College and master's degree from Duke University's Nicholas School of the Environment in either environmental management or forestry. For more details, visit [washcoll.edu/dukedualdegree](http://washcoll.edu/dukedualdegree).

## NATURAL AND ACADEMIC RESOURCES

- In the Toll Science Center and Cromwell Hall Environmental Laboratory, you can analyze the samples you have gathered from our research vessels on the Chester River, or local streams, wetlands, and farm fields for pollutants such as metals, greenhouse gases, or pesticides.
- At the River and Field Campus (RAFC) you'll have access to 2.5 miles of Chester River waterfront as well as forests, wetlands and grasslands as part of this 4,700-acre research and agricultural station.
- Our waterfront building, the Semans-Griswold Hall Environmental Hall, fulfills the Living Building Challenge and has a unique river flow-through system that circulates water directly from the Chester river into the lab, allowing you to explore the ecology of the Chester River.

## INTERNSHIPS, CAREER DEVELOPMENT & CLUBS

Environmental science and studies students are typically among the top five majors across the College to conduct internships. Internship placements include the college's Geographic Information Systems (GIS) Lab or Center for Environment & Society, Chesapeake Consortium, Smithsonian Environmental Research Center, NOAA, University of Maryland Center for Environmental Science, ShoreRivers, and the Federal Highway Administration. Research Experiences for Undergraduates (REU) are available at many research universities around the country. You can also job-shadow with one of our partners including Delaware National Estuarine Research Reserve, Bergeson & Campbell Law Firm, the Virginia Department of Environmental Quality, and Hallaton, Inc., an environmental services firm. During the academic year, get involved and join your friends by participating in clubs such as the Student Environmental Alliance (SEA), Kappa Alpha Omicron (KAO) Environmental Honor Society, Campus Garden, Animal Impact or Habitat for Humanity.



## THE SUMMER RESEARCH PROGRAM

If you're interested in research with one of our faculty members, you can apply to participate in the John S. Toll Summer Research Program. This 10-week program will help you gain more hands-on research experience while earning a stipend and free on-campus housing. Working one-on-one with faculty, you can participate in cutting-edge projects such as metal distribution in sediments in the Chester River, environmental pollutant impacts on amphibians, greenhouse gas emissions in agricultural and wetland ecosystems, and climate change impacts on oysters.



## Anna Windle '16

*Environmental Science major, Biology and Anthropology minor*

In 2014, Anna Windle '16 traveled with the Department of Environmental Science and Studies' field course to Ecuador, studying in the Amazonian rainforest as well as the Galápagos Islands off the coast. The previous summer, she traveled with the College's Tanzania Seminar and completed a research paper on women's healthcare in the African country. Through her 2015 summer internship with the National Oceanic and Atmospheric Administration (NOAA), Windle spent 10 weeks at Rookery Bay National Estuarine Research Reserve, a pristine, 110,000-acre habitat of mangrove forest and lagoons, canals, and creeks of the Ten Thousand Islands. Open water habitats comprise 70,000 acres, and this is where Windle spent most of her time. She lived on Marco Island at the reserve's field station, traveling by boat each day to remote areas to conduct research on loggerhead sea turtle nesting activity.

Windle completed her Master's Degree in Environmental Management with a concentration in Coastal Environmental Management from the Nicholas School of the Environment at Duke University in 2018. In September 2017, she won a highly competitive NOAA/North Carolina Sea Grant fellowship to assess oyster reef health using unoccupied aircraft systems (UAS), or drones. Currently, Anna is a PhD student at the University of Maryland Center for Environmental Science's Horn Point Laboratory in Cambridge, Maryland. Her research includes satellite and UAS remote sensing for water quality assessment in the Chesapeake Bay.