

# ENVS NEWSLETTER

College of the Holy Cross Department of Environmental Studies Worcester, MA 01610 508-793-2288

October 2024 Vol. 5

This newsletter provides Environmental Studies Department majors and minors with important updates including registration information for Spring 2025 and happenings in the department.

### DEPARTMENTAL SPRING 2025 COURSES

For schedule of classes and course descriptions, refer to the College Catalog or STAR online.

ENVS 117-01	Environmental Science	MWF 8 AM-8:50 AM
ENVS 117-02	Environmental Science	MWF 10 AM-10:50 AM
ENVS 117-03	Environmental Science	MWF 10 AM-10:50 AM
ENVS 117-04	Environmental Science	MWF 12 PM-12:50 PM
ENVS 118-01	Environ. Perspectives	TR 9:30 AM-10:45 AM
ENVS 118-02	Environ. Perspectives	TR 11 AM-12:15 PM
ENVS 118-03	Environ. Perspectives	TR 12:30 PM-1:45 PM
ENVS 119	Environmental Narratives	R 9:30 AM-12:00 PM
ENVS 125-01	Intro to Climate Change	MWF 9 AM-9:50 AM
ENVS 125-02	Intro to Climate Change	MWF 11 AM-11:50 AM
ENVS 245	Sustainable Energy	MWF 1 PM-1:50 PM
ENVS 247	Introduction to Geographi	С
	Information Systems (GIS)	MW 3 PM-4:15 PM
ENVS 299-S06	Worcester Eats	MWF 12 PM-12:50 PM
ENVS 299-S07	Disturbance Ecology	MWF 11 AM-11:50 AM
GEOS 270	Watershed Hydrology	TR 11 AM-12:15 PM
w/Lab		R 2 PM-5 PM

# NON-DEPARTMENTAL SPRING 2025 COURSES

SPR	1119 2025 CO	OKSLS
BIOL 163 L01**	Intro Bio Diversity & Ecol.	MWF 8 AM-8:50 AM
BIOL 163 L02**	Intro Bio Diversity & Ecol.	MWF 9 AM-9:50 AM
BIOL 233	Freshwater Ecology	TR 2 PM-3:15 PM
BIOL 237	Plant Ecology	TR 9:30 AM-10:45 AM
w/Lab		T 2 PM-5 PM
BIOL 275-01	Biological Statistics	TR 8 AM-9:15 AM
BIOL 275-02	Biological Statistics	TR 9:30 AM-10:45 AM
BIOL 285	Invertebrate Biology	MWF 10 AM-10:50 AM
w/Lab		W 2 PM-5 PM
BIOL 331	Ecosystem Ecology	WF 12:30 PM-1:45 PM
CHEM 141	Environmental Chemistry	TR 11 AM-12:15 PM
ACCT 160	Sustainability and	
	Citizenship	MWF 10 AM-10:50 AM
ECON 224-01	Environmental Econ.	MWF 11 AM-11:50 AM
ECON 224-02	Environmental Econ.	MWF 12 PM-12:50 PM
ENGL 351	Thoreau: Then & Now	WF 12:30-1:45 PM
ENGL 399-S12	Climate Change & The	MWF 10 AM-10:50 AM
RELS 304	Contemporary Novel	W 3 PM-5 PM
STAT 220-01	Land and Creation	TR 9:30 AM-10:45 AM
STAT 220-02	Statistics	TR 11 AM-12:15 PM
VAHI 340	Statistics	T 1 PM-3:30 PM
HIST 119-01	American Art and Ecology	MWF 11 AM-11:50 AM
HIST 119-02	Global Environ: Past & Present	MWF 12 PM-12:50 PM
HIST 399-S16	Global Environ: Past & Present	
	Tech., Environ., and Industry in t	the MW 3 PM-4:15 PM
	East Asian Past	

\*Please check STAR for any additional course information or updates\*
\*\*There will be Lab sections for this class. Please check STAR for these Lab times.

#### FOR DEPARTMENT QUESTIONS CONTACT:



#### **Prof. Sarah Luria**

Chair, Department of Environmental Studies

sluria@holycross.edu Beaven 114

### **ENROLLMENT SCHEDULE**

Spring 2025 Advising: OCT. 22
Enrollment: Nov. 7 - Nov. 19

Expected Grad.	STAGE 1	STAGE 2	Open Enrollment
Spring 2025	Thurs, Nov. 7	Fri, Nov. 8	Tues, Dec. 3
& Fall 2025	7 AM - 2 PM	7 AM - 11:59 PM	8 AM
Spring 2026	Mon, Nov. 11	Tues, Nov. 12	Tues, Dec. 3
& Fall 2026	7 AM - 2 PM	7 AM - 11:59 PM	8 AM
Spring 2027	Thurs, Nov. 14	Fri, Nov. 15	Tues, Dec. 3
& Fall 2027	7 AM - 2 PM	7 AM - 11:59 PM	8 AM
Spring 2028 &	Mon, Nov. 18	Tues, Nov. 19	Tues, Dec. 3
Fall 2028	7 AM - 2 PM	7 AM - 11:59 PM	8 AM



### NEW CLASSES: SPRING 2025

#### ENVS 299-S07: Disturbance Ecology Professor Phillip Dugger Time: MWF 11:00-11:50 AM

Disturbance plays an important role in ecosystem processes at multiple spatial and temporal scales, from an individual tree struck by lightning to long-term global climate change. In this seminarstyle class, we will examine how disturbance shapes the composition and structure of ecological communities and how communities respond to and recover from various types of disturbances at all scales. Whole-class and group discussions based on the most up-to-date research articles and textbook readings will be complemented by individual projects that delve deeper into specific topics of students' choosing.

#### ENVS 299-S06: Worcester Eats Professor Christopher Staysniak and Professor Daina Harvey Time: MWF 12:00-12:50 PM

Climate change will have severe implications for our food system; causing increased flooding, coastal erosion, crop failure, plant migration, species extinction, and habitat destruction. Given this new urgent reality, this course examines resiliency within the Worcester County food system. This is a CBL course.



### NEW CLASSES: ON THE HORIZON

# **ENVS 299-S08: Environmental Justice Professor Holly Moulton**

Environmental justice is, put simply, the fight and the right for everyone, regardless of identity and geography, to live, work, and play in a clean and healthy environment. While this may seem like an obvious statement (i.e. that everyone deserves to be able to live in a healthy world), it is far from reality. In this course, we will look at what it means to fight for environmental justice across history and the world, and why it is even necessary that this should be a fight at all. We will look at the roots of environmental injustices in the US and across the globe as well as the contemporary issues those injustices have created, including the movement from environmental justice to climate justice. We will also collectively imagine what an environmentally just future might look like. Students will research environmental and climate iustice issues in the Worcester area and share their work through entries in the EJ Atlas, a creative project, and a hybrid policy and research document.



### **FALL '24 EVENTS**

Oct. 30 ENVS Information Session 4:30 PM - 5:30 PM Swords 210 Cider and doughnuts provided!

Nov. 3 Off-campus clean up 12:00 PM Meet at the Jo Patio

Nov. 10 Off-campus clean up 12:00 PM Meet at the Jo Patio

Nov. 15 Study Abroad application due

Nov. 17 Off-campus clean up 12:00 PM Meet at the Jo Patio

# BECOME A GREEN INFLUENCER WITH THE OFFICE OF SUSTAINABILITY

Sign-up now for the Office of Sustainability's low commitment outreach program! Green Influencers post sustainability content twice a month to their Instagram stories to help spread the word about the environment. Visit @purplegoesgreen on Instagram for a link to sign-up!



# HOW TO GET AN ENVS DEGREE

#### MAJOR REQUIREMENTS

#### 14 required courses

- ENVS 117 Environmental Science
- ENVS 118 Environmental Perspectives
- ENVS 404 Capstone Seminar
- Two of these introductory science courses (BIOL 163, CHEM 141 (w/lab) or CHEM 181, GEOS 150, PHYS 115)
- Two environmental humanities courses, one of which must be 200-level or higher
- One environmental economics course (ECON 224)
- One additional environmental social science course
- Two additional environmental science courses, one of which must include a lab
- A quantitative or spatial analysis course (GIS or Statistics or MATH 303 Mathematical Modeling)
- Two more upper level environmental electives in any area. One of the upper level course requirements can be fulfilled by undergraduate research (e.g., BIOL 401 or college honors thesis) for academic credit with prior permission of the ENVS Director.

#### MINOR REQUIREMENTS

#### 7 required courses

- ENVS 117 Environmental Science or BIOL 280 General Ecology
- ENVS 118 Environmental Perspectives
- One environmental humanities course
- One environmental social science course
- Two additional environmental science courses
- One environmental course in any area

# Need Resources for Internships & Jobs? Visit The Center for Career Development!

#### **Director, Cameron Smith**

Career Development Email: careers@holycross.edu

All appointments should be made via Handshake.

Office hours are Mon.-Fri. 9:00 - 5:00 pm

Drop-in hours are Mon.-Fri. 1:00 - 4:00 pm

Drop-ins are available daily during the academic year for quick questions—no appointment is necessary. Drop-in hours provide an opportunity for students who have quick questions or who wish to have a resume or cover letter critiqued, to meet with a staff member for 15 minutes.

https://www.holycross.edu/support-andresources/career-planning-center

#### **Departmental Career Liaison:**

Professor Staysniak Email: cstaysni@holycross.edu



### ADDITIONAL ENVS INTERNSHIP & JOB RESOURCES

- Blackstone River Coalition (Volunteer)
- Broad Meadow Brook Wildlife Sanctuary and Conservation Center
- EcoTarium
- Greater Worcester Land Trust
- Harvard Forest Undergraduate Student Opportunities
- MassDEP Internships
- Olympic National Park Summer Employment
- Polaris Project: Undergraduate Research in the Siberian Arctic (will resume in 2025)
- Regional Environmental Council

### STUDY ABROAD

# Prof. Justin McAlister is the ENVS study abroad advisor.

Please contact him with any questions about how you can incorporate a study abroad experience into your ENVS major or minor.

jmcalist@holycross.edu -- Beaven 113C

#### **LINKS FOR STUDY ABROAD OPPORTUNITIES:**

- HOLY CROSS STUDY ABROAD WEBSITE
- THE SCHOOL FOR FIELD STUDIES (SFS) WEBSITE

# STUDY ABROAD EXPERIENCE



#### Michelle Rife '27

Location: Bermuda Program: Maymester '24

The Maymester in Bermuda was the best mix of cultural experiences and environmental science in one. By the end of our trip, we understood what it took to live on such a small island, from water use habits to the cost of living. I really enjoyed being able to work directly with the materials we were studying, like sampling microplastics at different beaches and exploring the local waste incineration plant to understand its processes. The outlook it gave me on what it means to "live sustainably" both at Holy Cross and in the greater world is one that I will keep for years to come.

# FACULTY PUBLICATIONS

**Linzer, Joanna** (2023). "Upstream, Downstream: Iron Mining in Early Modern Japan and the Uneven Spread of Environmental Protection," *Environmental History*, **28**(3), 495-521.

**Seitter, K. L.**, E. Tipton, and P. A. Higgins (2024). "Providing better support for entrepreneurial activities in the weather, water, and climate community." *Bull. Amer. Meteor. Soc.,* **105**, E1025-1033. https://doi.org/10.1175/BAMS-D-23-0301.1

Mascia, Raphaella (HC Class of 2021), and Harvey, Daina Cheyenne. (2024). "Mapping Malus in Massachusetts: Creating a System for Apple Foraging." Pp. 254-263 in *Urban Food Mapping: Making Visible the Edible City*, edited by Katrin Bohn and Mikey Tomkins. New York, NY: Routledge.

**Gaffey C.B.**, Bax N, Krauzig N, Tougeron K (2024). "A call to strengthen international collaboration to assess climate change effects in polar regions." *PLOS Clim*, **3**(10): e0000495.

https://doi.org/10.1371/journal.pclm.00004

Moulton, Holly (2024). "Indigenous women are the 'guardians of Pachamama': Territorial sovereignty is indispensable for just climate change adaptations in Peru." Global Environmental Change, 89. https://doi.org/10.1016/j.gloenvcha.2024.10 2934

**Seitter, K. L.**, (2024). "The Wicked Problem of Transitioning to Renewable Energy." *American Scientist*, **112**(6), 336-339.

# JOB OPPORTUNITY FROM THE OFFICE OF SUSTAINABILITY

In 2007, the College of the Holy Cross signed a national Carbon Commitment, aiming to reach carbon neutrality by 2040. Over the last decade, the College has decreased its carbon footprint by over 50 percent. Holy Cross' Office of Sustainability seeks an environmental sustainability assistant to support general campus sustainability initiatives. The assistant will work directly with the director of sustainability to develop, implement, and market environmental sustainability projects.

Are you interested in a career in sustainability, social responsibility, environmental education, behavioral change, or program management? Do you have a good understanding of environmental sustainability and knowledge of campus sustainability efforts? Do you have effective written and verbal communication? If so, you are encouraged to apply for this position!

This is a paid position and is expected to average five hours per week.

How to apply: Send your resume to Associate Director of Facilities Operations for Environmental Services, Christi Lucia (clucia@holycross.edu), along with 5-8 sentences on what campus sustainability means to you and how students play a role in this work.

Students should check their emails for a more in-depth description of this position and candidate qualifications.

# FACULTY INTERVIEWS: PROFESSOR HOLLY MOULTON



#### **Professor Holly Moulton**

Assistant Professor Environmental Studies

Fields: Gender and climate justice, high mountain ecosystems

1. What discipline did you get your degree in and what led you to first pursue this field of study? Did you always know you wanted to pursue an environmentally related field, or did it surprise you?

My PhD is in Environmental Sciences, Studies, and Policy - which is inherently interdisciplinary! I am also trained as a human geographer who specializes in Latin America. I studied abroad in Lima, Peru in 2011 and met amazing people working in development, water access, environmental justice, and human rights. This study abroad experience was critical to developing a passion for and commitment to the field I am in now. I have also had a huge love for mountains and glaciers since I was little (I have a trunk full of National Geographics to prove it).

When I went back to school to get my Master's in Latin American Studies, I knew that I would continue to work in Peru on issues related to climate change and glacier melt. But before going back to school, I worked as a bilingual ESL (Spanish-English) teacher in Chicago, a grant writer for a STEM charter school in Denver, and a strategy consultant for a healthcare company in Colorado. I also worked as a vet tech for over 7 years and thought that I might want to be a veterinarian. I'm happy to be here today, and also it's been a winding road that I certainly did not plan on!

# 2. What is an environmental issue that you are passionate about?

I am very passionate about climate justice, which is an interdisciplinary field of research and activism that addresses the unequal impacts of climate change based on everything from race to gender to socioeconomic status to geography. Climate justice research also studies the ways that we got to this crisis in the first place, showing for instance how fossil fuel companies sowed the seeds of climate change doubt for decades. I am most passionate about research that seeks to shift the top-down power dynamics of climate change adaptation by demonstrating possible pathways out of this crisis, such as through community-based projects that center the lived experiences and desires of the most marginalized, like the Quechua women who I work with in Peru.

#### 3. Where do you call home?

New Hampshire is my original home, and more specifically, the shores of Lake Winnipesaukee. I have an enduring love of lakes of all kinds (especially glacial lakes) and would prefer to be in lake water than on land, especially on humid summer days! More recently, Oregon was my home away from home. I lived in Eugene, Oregon for six years and developed lasting friendships, connections to place, and collaborations there. Now, I say home is where my dog and cat are at any given time.

# 4. What have you been working on? (projects, research, etc.)

Recently I have been working on a project that asks how Indigenous women's organizations in Peru have organized to resist the twin threats of climate change adaptation and state-sanctioned extractive activities in Peru. I am also working with collaborators to think about how deglaciating mountain ranges across the globe are viewed by a variety of different people, from local communities to national governments to transnational corporations. My ongoing project combines climate change impacts, women's home gardens, and climate grief to propose feminist frameworks for climate change adaptation.

# 5. Tell us about your experience at Holy Cross so far.

I have been so impressed with the enthusiasm that Holy Cross students have for environmental issues of all kinds. Every time I step into the classroom I am met with groups of students who care deeply about everything from environmental racism to climate change to conservation. I'm excited to collaborate with students and faculty members on future environmental and climate justice research projects. I hope that students who are interested in research and classes on climate/environmental justice, women's and gender studies, Latin America, and glaciers will come chat with me!

# FACULTY INTERVIEWS: PROFESSOR PHILLIP DUGGER



#### **Professor Phillip Dugger**

Visiting Assistant Professor Environmental Studies

Fields: Forest community ecology, network ecology, food web interactions, mutualistic species interactions

# 1. What discipline did you get your degree in and what led you to first pursue this field of study? Did you always know you wanted to pursue an environmentally related field, or did it surprise you?

I have a PhD in Environmental Science from UMass Boston. I've been interested in ecology since high school, and biology in general since grade school. My father, a habitat biologist, took us backpacking and camping a lot in the forests and mountains of the Pacific Northwest. He taught me a lot about the forest, trees, birds, and other wildlife, and instilled in me a deep appreciation for those beautiful and majestic ecosystems. I became interested in tropical ecology before college, and more generally forest and plant ecology during my undergrad years. I eventually settled on community ecology because of my strong interest in mutualistic plantanimal interactions like seed dispersal and pollination.

# 2. What is an environmental issue that you are passionate about?

I have always been deeply concerned about habitat conservation—of course, because my dad was a habitat biologist! But that concern was originally based on my emotional connection to nature—It has matured into a genuine concern for the welfare and sustainability of humanity and other life on Earth, which will depend on us achieving a sustainable balance of resource use, environmental exploitation, and conservation of ecosystem services that we depend on for our survival as a species.

#### 3. Where do you call home?

My heart will always be in the Pacific Northwest, though New England has been my adopted home for the past fifteen years.

# 4. What have you been working on? (projects, research, etc.)

I am working on publishing research from my dissertation, which focused on multi-decadal changes in tropical tree fruiting phenology in Rwandan montane rainforest. I am hoping to expand my research to temperate forest systems, using a network analysis approach to analyze community-scale species interactions and to make predictions of ecosystem resilience to environmental change.

### 5. Tell us about your experience at Holy Cross so far.

I have been impressed with the resources and effort that Holy Cross puts into faculty development programs. There is clearly a strong emphasis on the quality of education, and I see the payoff in the engagement and motivation of Holy Cross students. It's also a beautiful campus with great facilities, and it is a true pleasure to work here.

# GET YOUR GREEN LIVING CERTIFICATION

The Green Living Certification, hosted by the Office of Sustainability, recognizes students for their positive environmental choices.

Certification is simple. Complete at least one action item in each of the six categories on the MyHC checklist and submit the form. Every student who gets certified receives a snazzy sticker in their mailbox!



https://tr.ee/7WjOFdp2yA

### CALL TO STUDENTS

If you wish to be featured in the Spring 2025 Newsletter under a "STUDENT HIGHLIGHT" section

Please contact envsstudentworker@holycross.edu



This newsletter was created by the ENVS Publication Committee: Prof. Keith Seitter, Editor Jayde Waibel '27 and Paula Hall

October, 2024