

## **ENVS** Georgia NEWS Tech.



**Environmental Science Undergraduate Program**  **FALL 2023** 

Happy fall!

We are thrilled to launch our first ever newsletter covering recent news from the Environmental Sciences (ENVS) program at Georgia Tech.

This fall, we are celebrating many things:

- 25 GT students have joined as ENVS majors!
- A highly successful ENVS launch event with 100+ attendees and keynote by climate activist and author Zahra Biabani
- Revamped courses to address UN Sustainable Development Goals
- Financial support from GT College of Sciences, Amplify Momentum Program, and Sustainability Next Initiative
- Our new logo and swag designed by Hello Human
- Community building and career networking events

• Our devoted faculty, students, and staff, especially Natasha Lawson and EAS

student workers for help with special events

Thank you for your role in ENVS' success!

Your ENVS co-directors.

Jennifer Glass (right) Samantha Wilson (left) Linda Green (middle)



## eas.gatech.edu/envs

## **SPRING 2024 COURSES**

Registration starts Monday November 6 (check Time Ticket)

Make sure to check for any pre-requisite requirements or cohort restrictions on classes. Check to make sure you do not have any holds on your record that would prevent registration.

#### Required courses:

(does not include Core requirements like MATH and Social Sciences)

BIOS 1107: Biological Principles (Lecture CRN: 31594 w/ any linked lab)

BIOS 2300: Ecology (Lecture CRN: 31598 w/ any linked lab) OR

BIOS 2310: Problems in Ecology (Lecture CRN: 33873 & Lab CRN: 33874)

CP 4510: Fundamentals of GIS (CRN: 20521 OR CRN: 31850)

EAS 1600: Intro. Environmental Science (Lecture CRN: 20871 w/ any linked lab)

EAS 2600: Earth Processes for Majors (Lecture CRN: 30591 & Lab CRN: 30580)

EAS 4480: Environmental Data Analysis (CRN: 29643)

PUBP 3315: Environmental Policy and Politics (CRN: 33431)

#### Some elective courses:

BIOS 4221: Biological Oceanography (CRN: 33558)

CP 4190: Introduction to Climate Change Planning (CRN: 33934)

CP 4813: Sust Dev Plan: Puerto Rico (CRN: 33620)

EAS 3110: Energy, Environment, and Society (Lecture CRN: 29606)

EAS 4300: Oceanography (CRN: 29608)

EAS 4350: Paleoclimatology and Paleoceanography (CRN: 33840)

EAS 4740: Atmospheric Chemistry (CRN: 29645)

EAS 4803: EAS & Policy (CRN: 33770)

PUBP 3320: Climate Policy (CRN 34241)

PUBP 3350: Energy Policy (CRN: 29253)

\*please contact Dr. Wilson for permission to take other ENVS related courses

Please email either Dr. Wilson
(samantha.wilson@eas.gatech.edu) or Dr. Handlos
(zachary.handlos@eas.gatech) to set up an
advising appointment

## FACULTY SPOTLIGHT

#### What course(s) on the ENVS curriculum do you teach?

Principles of Biology (BIOS 1107), Ecology Lecture (BIOS 2300), Ecology Lab (BIOS 2301) and Experimental Design and Biostatistics (BIOS 4401). Sometimes upper-level biodiversity/behavioral biology electives.

#### What is your favorite part of being a faculty member at Tech?

I enjoy working on really hard problems that require many minds to sort out. When I've got a team of students who are motivated to learn and excited (not scared!) of the unknown, that's the sweet spot for me. I truly enjoy giving students their first exposure to parts of science and watching as they grow to build their identity in that space. The clever solutions and resilience they show is heartening, as I feel like I'm helping to cultivate the people who will better our world.

#### What inspired you to choose this career?

I tried out a lot of things through jobs, classes, research, internships, volunteering, etc. to figure out what appealed to me and what didn't, and I credit a willingness to try new things with helping me to find my passion. Courses are great, and I'll likely see you in many, but I hope you will explore meaningful experiences outside of class, and ideally, off-campus. Be curious!

#### What are your research interests?

My research is strongly behaviorally based, but not specific to a particular organism. Instead, I have two foci: wild animal behavior, and student behavior in learning. Most recently, I've been working with Smithsonian on Snapshot USA, a large, networked camera trap project to map and quantify (mostly mammal) species across the US. I also do quite a bit of 'captive' behavior work in collaboration with folks at Zoo Atlanta. My most recent student-centered work explores how students reason and learn with quantitative information, particularly in how they understand and communicate real science.

#### Do you ever involve undergraduates in your research?

The camera trap work is facilitated through the Living Building VIP (https://vip.gatech.edu/teams/vwk) in a large team that is always looking for new recruits each term, even if you're new to research. For those interested in student learning, I periodically will take on new students for research credit (BIOS 4699); email me about your interest in the project(s) and your resume (including any coding/data experience you have), and we'll go from there.

#### What else should we know about you?

I'm a pretty big fan of talking science, so if ever see me around and want to chat about some cool, random, and puzzling thing you saw, please share!

DR. EMILY WEIGEL SENIOR ACADEMIC PROFESSIONAL SCHOOL OF BIOLOGICAL SCIENCES



## STUDENTS SPOTLIGHT

"The new ENVS major is an all-encompassing major that connects many different disciplines into the field of environmental science. The major not only delves into the actual science of the environment, but also explores the applications of this knowledge into looking at many different fields, including public policy, economics, conservation, and so much more. I decided to switch ... to ENVS because the new major provided a more directed pathway involving environmental science... The ENVS major allows students to customize their studies of environmental science, and through this flexibility I was able to take various international affairs courses, business courses, and economics courses, all relating to environmental issues. "

- Kate Albertus, 3rd year

"I am beyond excited to expand my passion of the natural world and bond with an incredibly caring community through the Environmental Science program at Georgia Tech. As our new program was born this year, so was a new wave of healing for the environment that I aim to sustain."

- Camden Hyde, 1st year

"Before research I was somewhat aimless about my future, but after becoming involved and switching to the new major of environmental science I have developed a clearer vision for myself. Research has made me more patient, determined to face challenges, and reaffirmed my future as a scientist."

- Helen Tran, 3rd year

"As a first year, I was already nervous about coming to college as is, much less joining a brand-new program, but it has been so much more of a positive experience than expected. I have already found such a community of great people who are driven to bring positive change to not only Georgia Tech, but also the ever-evolving world around them. All of my classmates and professors have made me feel like I am serving a bigger purpose with studying ENVS and have pushed me to work harder these past few months. I am so excited to continue in the ENVS program in the coming years and get to know the professors and other students even better!"

- Caroline Fortune, 1st year

## ENVS majors share their thoughts on the new major

### **ENVS LAUNCH AUGUST 25, 2023**



We celebrated the launch of the ENVS program with a special event in the Kendeda Building. Approximately 100 students, faculty, and staff attended and enjoyed a vegetarian buffet and cake. GT President Ángel Cabrera and College of Sciences Dean Susan Lozier shared their support for the ENVS program. Climate activist Zahra Biabani gave an inspirational keynote address. Free copies of Biabani's book "Climate Optimism: Celebrating Systemic Change Around the World" (Mango Publishing, 2023) were distributed to students. Biabani signed copies of books and had meals with students and faculty. Watch Biabani's keynote is here: https://youtu.be/h6J57o8PRZQ







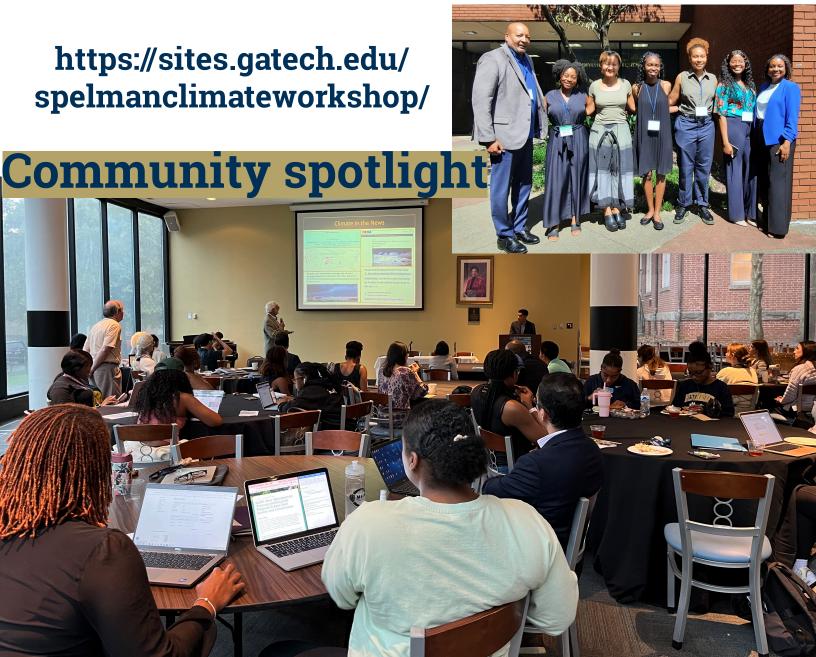
The EAS 1600 Introduction to Environmental Science Honors/Majors lab has been redesigned with support of Georgia Tech's Sustainability Next Initiative to include the United Nations Sustainable Development Goals. "Through field trips, students will investigate current climate change-induced conditions in urban Atlanta, with students collecting real time weather and watershed measurements to learn more about SDGs surrounding urban sustainable cities and clean water," said Lecturer Shelby Ellis. "In this reconfigured learning environment, we hope to foster student momentum on becoming educational leaders in their local community on climate justice, while gaining an understanding that there are attainable climate actions that can be taken now to combat climate change." Photos above show students sampling a local watershed in October 2023.

On September 8-10, EAS undergraduates and faculty enjoyed a weekend camping trip to Cloudland Canyon in North Georgia, sponsored by Rutt Bridges and organized by Dr Samantha Wilson. Many first-time campers discovered the thrill of the great outdoors. We plan for this to be an annual tradition going forward.



## CLIMATE SUSTAINABILITY: CHALLENGES AND OPPORTUNITIES

Georgia Tech graduate students organized the 2023 Climate Sustainability
Workshop at Spelman College on September 10-14. Presentations and activities
tied together the themes of climate justice and community engagement, climate
science, climate modeling, and climate technology & solutions. Over 60 students
at Spelman learned about the challenges and many opportunities in climate
sustainability research. Georgia Tech's President Angel Cabrera and President
Emeritus Wayne Clough, and Spelman Provost Pamela E. Scott-Johnson, among
others, captivated the audience with engaging keynote speeches. The workshop
was supported by UCAR/NCAR, ORAU, the Strategic Energy Institute, DirACC,
the Brook Byers Institute for Sustainable Systems and the Ocean Science and
Engineering Program at Georgia Tech.





On October 12, students enjoyed lunch and a presentation "Mapping Your Future: Insights on GIS and Environmental Careers" by Kelsey Abernathy (EAS'21), currently GIS Support Engineer II at Georgia Tech. Abernathy shared how she discovered Geographic Information Systems (GIS) as a career tool.

# Get your free ENVS canvas tote and sticker!





For swag, contact samantha.wilson@eas.gatech.edu



## **ENVS IN THE PRESS**

New Environmental Science major launched



A cornucopia of garbage used to symbolize human waste sits on display. The addition of the Environmental Science major marks the Institute's continued dedication to progress and service. // Photo by Tyler Parker Student Publications

https://nique.net/life/2023/09/01/new-environmental-science-major-launched/

## New Georgia Tech Environmental Science Degree Launches

The interdisciplinary Environmental Science (ENVS) degree program, developed by faculty in the Schools of Earth and Atmospheric Sciences and Biological Sciences, is now enrolling students interested in a wide variety of environment-related

careers. www.gatech.edu/news/2023/06/13/new-georgia-tech-environmental-science-degree-launches

#### The Atlanta Journal-Constitution

## What's new on Georgia's college campuses for fall 2023?

#### **Georgia Tech**

Students can complete degrees in three new majors: environmental science, atmospheric and ocean sciences, and solid earth and planetary sciences.

www.ajc.com/education/whats-new-on-georgias-college-campuses-for-fall-2023/SBRCBFHOSBG4BDELACGMORFFLI/

# CHECK OUT OUR "LITTLE FREE LIBRARY"



### Ford ES&T 1250 EAS mail room

Books for undergraduates

A range of books on environmental topics ... take a book or leave a book

Funded by Georgia Tech Honors Program



## SPECIAL THANKS

#### **ENVS Curriculum Committee (2023-2024)**

Samantha Wilson (EAS, chair)
Richard Barke (PUBP)
Chrissy Spencer (BIOS, ad hoc)
Martial Taillefert (EAS)
Anna Traykova (CRP)
Emily Weigel (BIOS)
Marc Weissburg (BIOS)

#### **ENVS Steering Committee (2021-2023)**

Jean Lynch-Stieglitz (chair)
Brian Hammer
Jennifer Leavey
Samantha Wilson

#### Additional thanks to:

Gulsah Akar, David Collard, Zachary Handlos, Jenny Hirsch, Grey Huey, Jess Hunt-Ralston, Natasha Lawson, Susan Lozier, Andrew Newman, Loraine Phillips, Renay San Miguel, Todd Streelman, Cassidy Sugimoto, Yuanzhi Tang, Rebecca Watts Hull, Laura Williams, Ruthie Yow, and all ENVS faculty, staff, and students

### QUESTIONS? COMMENTS? SUGGESTIONS?

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Dr. Samantha Wilson ENVS Curriculum Director samantha.wilson@eas.gatech.edu

Dr. Linda Green ENVS Experiential Learning Director linda.green@gatech.edu



## Looking for internships?

www.linkedin.com/groups/8537487/

## Giving to ENVS:

https://cos.gatech.edu/giving