

Geography & Sustainability Undergraduate Student Handbook



2025-2026

Disclaimer

This document was published in August 2025 and was correct at that time. The Geography and Sustainability Department reserves the right to modify any statement if necessary, make variations to the content or methods of delivery of programs of study, to discontinue programs, or merge or combine programs if such actions are reasonably considered to be necessary by Salem State University. Every effort will be made to keep disruption to a minimum, and to give as much notice as possible.



Student Conduct Code

The behavioral responsibilities of all Salem State University students can be found in [2025 - 2026 Student Conduct Code](#)

It is expected that the conduct of all students will be consistent with the educational purposes of the institution and will in no way interfere with the functions of the university as it seeks to fulfill that purpose.

Please use this Handbook as your guide to the Geography and Sustainability Department at Salem State University. Its purposes are several:

- To inform you about the many diverse opportunities available to you as a student in the department
- To inform you about the curriculum and course scheduling for each of the programs (majors, minors, concentrations) offered by the department
- To introduce you to the faculty and the students of the department

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01. Geography and Sustainability @ SSU

Welcome to our student-centered Geography and Sustainability Department! Geography is the study of the spatial distribution of the environment and of human activity across the surface of the Earth and its atmosphere. Each place on earth is distinguished by a unique mix of natural resources, cultural practices, and economic and political systems.

Geography, or technically Cartography, has been a part of Salem State University (SSU) since it opened in 1854. Today, Salem State's Geography and Sustainability programs combine a strong background in the academic tradition of geography and prepare students for applied fields such as:



- Environmental Sustainability
- Sustainable Tourism
- The Geospatial Technologies
- Regional Development and Planning
- Climate Change Resiliency and Adaptation Planning, and
- Natural Resource Management.

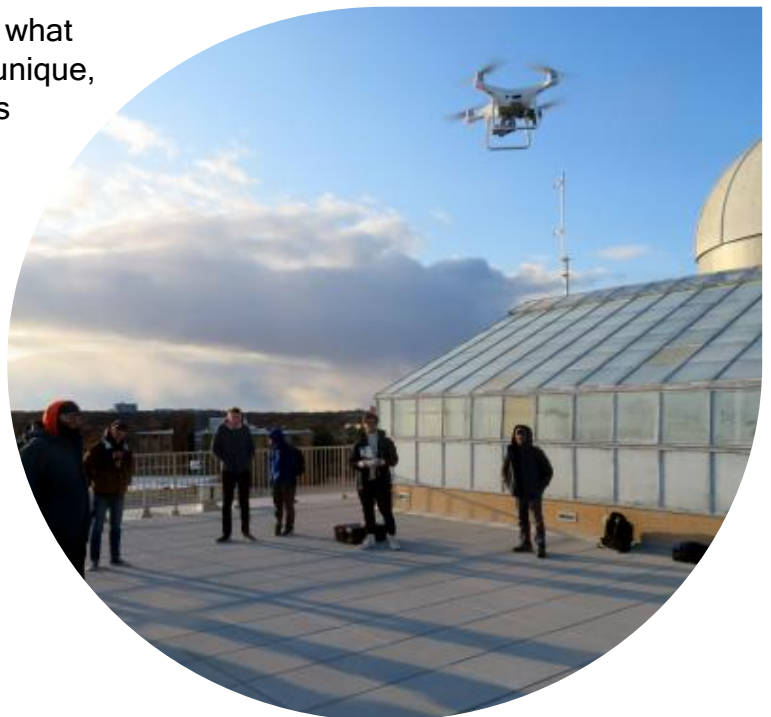
The teaching and use of geospatial computer technologies is a hallmark of our Department. Recently the use of drones has been added to our teaching and service to the local and regional communities.

Faculty within the Geography and Sustainability department pride themselves on providing expert mentorship and friendship for all students while at Salem State and beyond graduation. We train our students to be top scientists as well as concerned global citizens.

Geographers study what makes each place unique, and the connections and interactions

between places. Key areas of study in Geography include: human/environmental relationships, environmental systems, human spatial organization, transportation, and mapping (Geospatial information or GIS).

The graduates of the Geography and Sustainability Department are in strong demand in the Massachusetts' and national economies.



02. Why Study Geography at SSU?

1. A diverse curriculum. Curriculum in the Geography and Sustainability Department begins with a diverse core of human, physical, and technical courses. Concentrations in Environmental Sustainability, Sustainable Tourism and Cartography and GIS are all available. More flexible BA and BS geography degrees are also offered. There are a BS/MS Cartography and GIS program, an undergraduate GIS certificate and five minors also available

2. Study and collaborate with exceptional scholar-teachers whose research informs local, regional and international debates on topics like socio-economic development, environmental sustainability, spatial planning, climate change, tourism and urbanization.

3. Out of classroom education. We excel at providing field-oriented, hands-on experience. In addition to class field trips, the department organizes annual study tours to Europe and across the US. Previous trips included: Athens, Florence, Munich, London, Moscow, Beijing, Dublin, Belfast, Lisbon, Madrid, Montreal, Barbados, the Grand Canyon, the Southwest United States and Disney World.

4. The department's Digital Geography Lab (DGL) is regarded as one of the best academic geography-based computer labs in the U.S. This unique facility is dedicated to supporting and fostering undergraduate and graduate geo-spatial computing education and research. The DGL facilitates collaboration within the department, and is a focal point for faculty, undergraduate and graduate research.



5. Be part of a vibrant community of undergraduates, graduate students and faculty united by a commitment to use geographical tools and insights to address critical environmental and social challenges

6. Supportive and engaged faculty. All faculty are experts in their fields and have regional specialties. They pride themselves on providing expert mentorship and friendship for all students while at Salem State and beyond graduation.

03. Professionals with a Conscience

Geographers make valuable contributions to the work and performance of businesses, nonprofits, and government agencies, including:

- **Understanding Social Systems:**

Geographers analyze the ways in which people interact in economic, political, social, and spatial contexts. Geographers offer a powerful perspective that helps take the specific needs and interests of populations into consideration when making decisions.

- **Improving the Environment:**

Geographers study natural phenomena and work in areas as diverse as conservation, climate change, geoscience, meteorology, hazards, and natural resource management. Geographers understand human-environment relationships and how to use that information to manage natural resources and to protect the planet as a whole.

- **Enhancing Financial Performance:** Geographers, using geospatial tools such as GIS, remote sensing, and GPS, are able to map and analyze economic data in search of important spatial patterns and relationships that can significantly enhance business efficiency and profitability. Spatial and temporal analysis is an important component of a geographic education and a skill valued by a large number of business employers. *(Info Credit: AAG)*

"Through my years at SSU the professors in the Geography and Sustainability Department made me realize my passion on the subject! I discovered a different side of myself and how much I can do for our world."

Maria Navarro Marzolla, Class of 2020



04. Program Overview

As a geography major you use the concepts of place and space to better understand the physical and social processes that shape our planet. You explore why places are different; the economic, political and cultural systems that connect us locally, regionally and globally; and how we shape—and in turn are shaped by—our environment.

The Geography and Sustainability Department at Salem State offers:

- 3 Bachelor's degrees
- 1 BS/MS program
- 2 BS Concentrations
- 5 Minors
- 2 Undergraduate Certificates

For all Bachelor's programs, a five-course core group of classes forms the backbone of the curriculum. From there, both the BA and BS have significant flexibility in how they are completed, with the BA having a language requirement. Both BS Concentrations (Environmental Sustainability, Sustainable Tourism) have more structured curriculums, as does the BS in Cartography and GIS.

While in the program, students are strongly encouraged to get involved in the Department. Opportunities are many, from participating in the regional Geography Bowl, to working with a professor on a research project, to participating in a campus organization such as Sunrise Salem and MassPIRG, to working with other students in the Digital Geography Laboratory on assignments.

The Geography and Sustainability Department has some of the most active faculty on and off campus and they are always looking for students to join in on their activities. The department very strongly believes in experiential education whether it is dealing with real world situations in the classroom or traveling to a foreign country as part of a study-travel course. When graduating with a degree from the Geography and Sustainability Department at Salem State, students will be top scientists as well as concerned citizens.

The Geography and Sustainability department has directly enabled me and my peers to found and sustain climate crisis advocacy efforts on campus. The professors and department staff readily provide support and resources to accomplish this meaningful work on campus, and their unwavering help and kindness has been one of the biggest things I've loved about my SSU experience."

Joey Wolongevicz, Class of 2022



Courses of Study

Bachelor of Science/Bachelor of Arts Geography

These programs are for those looking for a general degree in geography.

- Both require less credits (33) than others, giving students ample opportunity to double major in other areas of interest (for example: elementary education)
- Requirements beyond the 5 class geography core are very flexible
- The BA has a foreign language requirement that the BS does not

PROGRAM REQUIREMENTS: [Click here!](#)

Bachelor of Science Geography (Environmental Sustainability Concentration)

Sustainability is at the core of the Geography and Sustainability department and this program exposes students to all aspects of this extremely important issue.

- This program requires more credits (42) than others
- Requirements beyond the 5 class geography core include
 - 4 Core Concentration courses (*for example: Food, Drink & the Environment*)
 - 2 Planning courses (*for example: Land Use Planning and Analysis*)
 - 1 Techniques courses (*for example: Introduction to GIS*)
 - 2 Perspective courses (*for example: Environmental Justice*)
- Internships are often available and encouraged
- Articulation Agreement with North Shore Community College Environmental Studies program

"SSU Geography Department delivers equal opportunity to all their students. I was given the chance to participate in the American Association of Geographers conference in New Orleans of 2018. As an undergraduate, the professors were excellent in teaching new geographic computer technology. This contributed to my successful experience at my internship as a G.I.S concentration major. My time here, I found a new love for the global environment, National Parks, and met new people along the way."

Brendan Lewis, Class of 2018



▪ Bachelor of Science Geography (Sustainable Tourism Concentration)

This program's focus was recently revised from the travel and tourism industry in general to sustainable tourism to reflect the department's overall focus on sustainability.

- This program requires less credits (33) than others, giving students ample opportunity to double major in other areas of interest *(for example: hospitality, history or elementary education)*
- Requirements beyond the 5 class geography core include:
 - 4 Core Concentration courses *(for example: Environmental Sustainability and Society)*
 - 2 Required Geography Elective courses *(for example: Ecotourism, Special Events and Festivals, or Parks and Protected Areas)*
- Internships are regularly available and encouraged

After graduating in 2022, I struggled to determine what to do. I had to look into what made me happy.

I reached out to Salem State's navigation center to discuss a new certificate program being offered for sustainable travel and tourism.



I had the privilege of working at the Executive Office of Economic Development as one of the Massachusetts Office of Travel and Tourism interns through the summer and fall of 2024! I got to be a part of so many amazing projects, and I feel so lucky to have worked alongside such talented people.

At the end-of-the-year Geography Awards, I was honored to receive the Massachusetts Office of Travel & Tourism Award by the Awards Committee for the geography and sustainability Department. This award was started 20 years ago by the Massachusetts Office of Travel and Tourism to honor a student from an institution of higher education in the Commonwealth of Massachusetts who excels academically while also balancing a job.

Julie Ginsberg, Class of 2025

If you are interested in sustainability, ecotourism, travel writing, museum education, placed based education, global industry, local culture and economics, food system, or luxury agriculture, these are just a sample of what you will study in this exciting program.



Bachelor of Cartography and GIS

This is a technology-focused program designed to provide students with the theoretical, practical and technical skills essential for the visualization and analysis of spatial data in a wide variety of applications

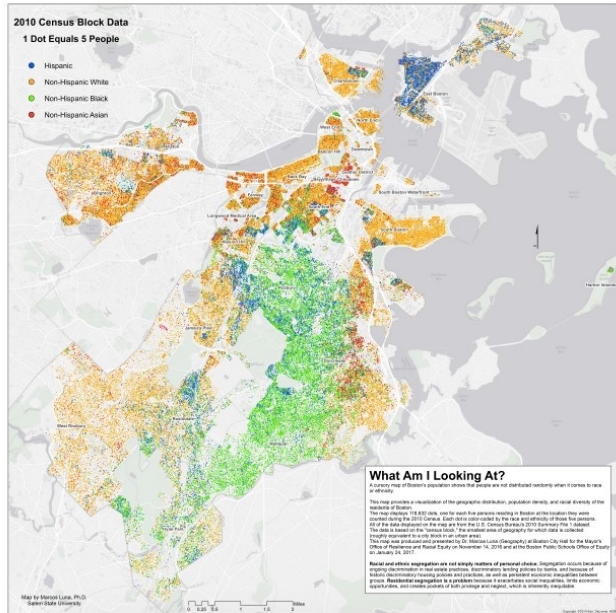
SSU GEOGRAPHY **SEGREGATION** CENSUS BLOCK POPULATION, 2010

Source: 2010 Decennial Census Sample File 1

Created by Marcos Luna

Department of Geography

Salem State University



- This program requires a medium number of credits (36-39)
- Requirements beyond the 5 class geography core include:
 - 3 Core Concentration courses (for example: Cartography)
 - 2-3 Techniques elective courses (for example: Drones and Aerial Imagery)
 - 2 Upper Level Geography elective courses
- Internships are often available and encouraged
- Option to enter BS/MS program is available to students in their junior year of study.

Geography Minors

Minors that incorporate geography courses are available in the following areas:

- Geography
- Environmental Sustainability
- Sustainable Tourism
- Travel and Tourism
- Geo-Information Science
- Urban Studies
- Oceanography

All of the minors require taking 15 credits in their various areas of study. All have 2-4 required classes with 1-3 elective classes.



Certificate in GIS

This certificate program is primarily for students interested in having a GIS skillset to accompany their major. While similar to a minor, for many careers, certifications are highly valued. This certificate is especially appropriate for Geography and Sustainability students not in the Cartography and GIS program. However, in many other professions, GIS skills are seen as very beneficial.

- This is a **15 credit** certificate that adds a technical certificate to any student's portfolio
- For non-GIS Geography students, this certificate allows them to show proficiency in this area of study
- This certificate is also available to non-matriculated students interested in advancing their skill set

When I began to piece together what I wanted out of a career two things came to mind; I wanted the chance to and explore, and I wanted my work to benefit the world as a whole. After being exposed to GIS it became clear to me how important spatial analysis is in subjects such as social justice, environmental conservation, or even business. The supportive and welcoming environment created by the professors in the geography department fostered a positive learning culture where I developed the skills I use today. My career now involves using GIS to help planners make decisions that improve public transit and reduce the carbon footprint in Massachusetts.

Mark Piandes,
Class of 2018



Certificate in Sustainable Tourism

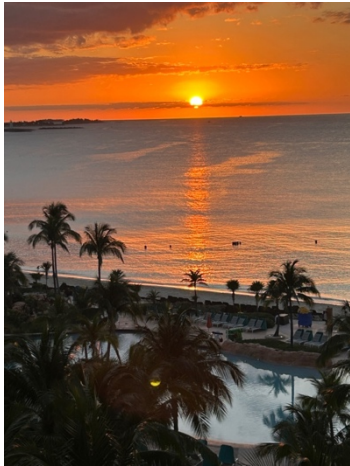
Tourism is a challenging and growing industry which provides diverse career opportunities. Upon completion of this certificate, graduates will find a wide range of employment opportunities in the tourism industry such as destination management organizations, economic development, wholesale travel, transportation, hotels, special events, travel blogging, parks, outdoor recreation, museums, attractions and more.

This program is designed to quickly lead to entry level positions in any of these or related fields. To meet the diverse needs of our learners, many of these subjects are available in a variety of delivery modes: In class, hybrid and hy-flex mode, and on-line.

A non-degree professional certificate program following the same curriculum provides a strategic overview of responsible destination management along with practical applications. The certificate is designed for tourism professionals and career changers who want to advance their careers and take advantage

of the increasing opportunities in the field. Participants will learn strategies and tools for recognizing and developing tourism products, creating visitor markets, minimizing the potentially negative effects of tourism and enhancing the sustainability of destinations so that they remain viable and attractive to visitors, and support their host communities..

- This is a **15 credit** certificate (5 courses) that adds a professional certificate to any student's portfolio.
- This certificate allows students to show proficiency in both the sustainability field and tourism.
- This certificate is also available to non-matriculated students interested in advancing their skill set



Transfer Students

Changing schools doesn't have to mean starting over. In the Geography and Sustainability Department we embrace students graduating from community college, changing four-year institutions, or looking for a fresh start. Here we are ready to make your transfer as seamless as possible.

If you are coming from a Massachusetts Community College, you may be eligible for MassTransfer Block, that allows you to enter Salem State with your general education requirements completed.

In addition, if you come from the North Shore Community College Environmental Studies program, an articulation agreement is in place between the schools automatically giving you up to 15 credits towards the SSU Environmental Sustainability concentration.

Whether you were at a 2-year or 4-year college or university, or recently earned your associate's degree, we are committed to ensuring your transfer experience is a success.

Transferring to Geography was the best choice I made in my academic career. I came to the Geography department after having to take a medical break from school, and the professors, as well as fellow students, helped me rebuild my confidence as a individual. I feel so supported and encouraged by my professors because they sincerely care for their students' success and well-being in and outside of the classroom. At Salem State, the Geography professors encourage students to explore and find what they are passionate about. They also help create a cohesive atmosphere where it is easy to make friends - late night pizza study parties with my new 'geography friends' definitely helped me ace final projects!

Shoshana Heerter,
Class of 2021



Please check [our website](#) for information about requirements and how to apply.



05. Student Involvement

The Geography and Sustainability Department aims to bring all students into a close, harmonious relationship with each other and with the wider community. We offer a variety of resources, opportunities and activities for our students, both inside and outside of the classroom. Broaden your horizons, gain new skills, make new connections – see what sparks your interest and get involved today!

Geographical Society Student Club

This is the department's student club, however membership is open to all students of Salem State University. The purpose of the geographical society is to bring the people of the world together in an effort to share and learn from each other about different beliefs, views, and cultures. We do this through the exploration of the many cultural and regional aspects within our reach.

The geographical society is host to a variety of events both informative and entertaining. Events range from physical activities such as rock climbing to educational events like the NESTVAL conference. The society aims to connect with nearby professionals and employers to inform members of the many opportunities available to geographers. Past career-oriented events have included trips to the ESRI offices in Danvers and trips to a local meteorology station.



We welcome you to join us!

Experiential Education

There is no better way to learn about the geography of the world than directly experiencing it and the Geography and Sustainability Department excels at providing field-oriented, hands-on experiences. These experiences range from class field trips such as flying drones over conservation land to map vegetation change, quantifying the economics of Haunted Happenings in Salem, spending a day experiencing the Boston urban fabric through riding MBTA trains to spending a week or two traveling throughout Peru, Morocco, Europe, the Caribbean or the United States.



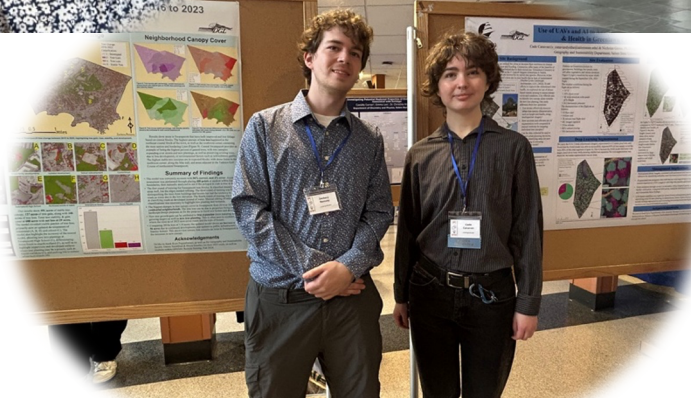
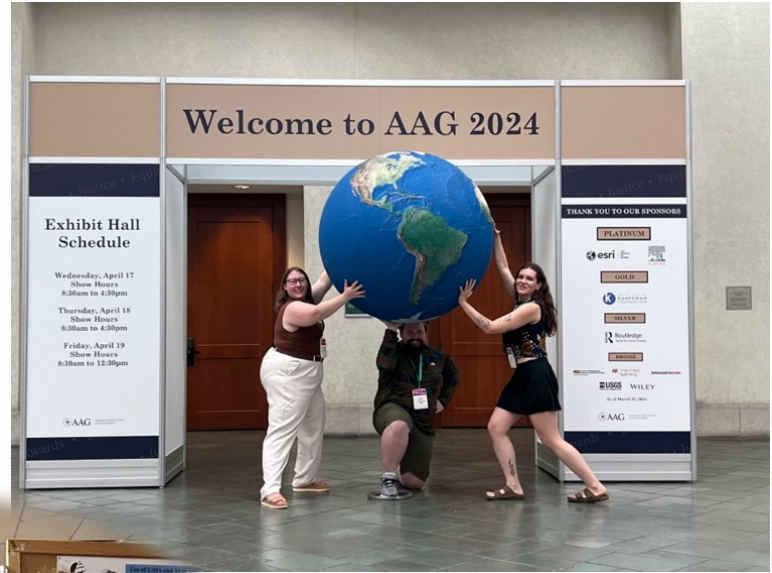
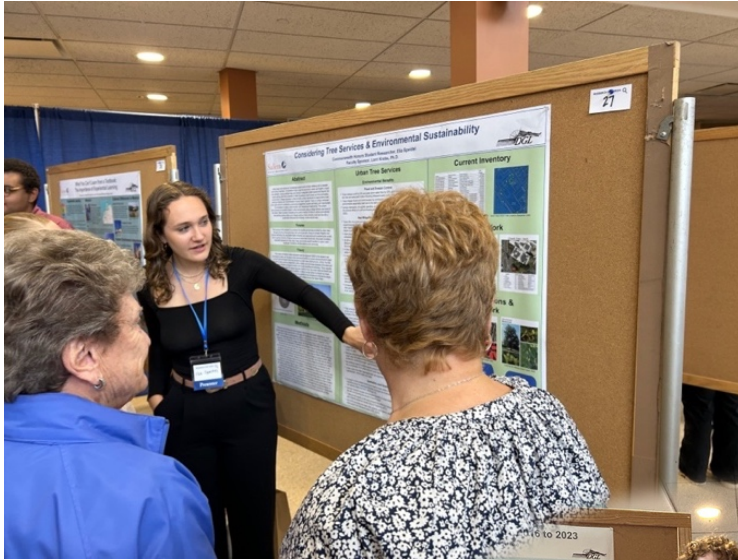
Salem State also has a very active Study Abroad program run through the Center for International Education, with opportunities to study one week, two weeks or an entire semester abroad. Additionally, we participate in the Walt Disney World College Program., offering internships, work experience and course credit at any of the Disney properties or experiences. We also coordinate opportunities for students such as when a recent Geography and Sustainability student studied abroad in Costa Rica and Mexico for a STEM+Society trip through the CIE with all the costs covered through a grant.

For more information, contact the chairperson Professor Lorri Krebs (lkrebs@salemstate.edu)



Present at a Professional Conference

The Geography and Sustainability Department feels involving students in professional meetings and conferences can be a very important piece of their academic journey. Meetings may be on campus or within the local community. Conferences range in topics and scale from a daylong regional climate change resiliency meeting to the five day annual meeting of the American Association of Geographers (AAG). Most times, if a student is presenting or participating in the conference, funding to alleviate some or all of the costs are available.

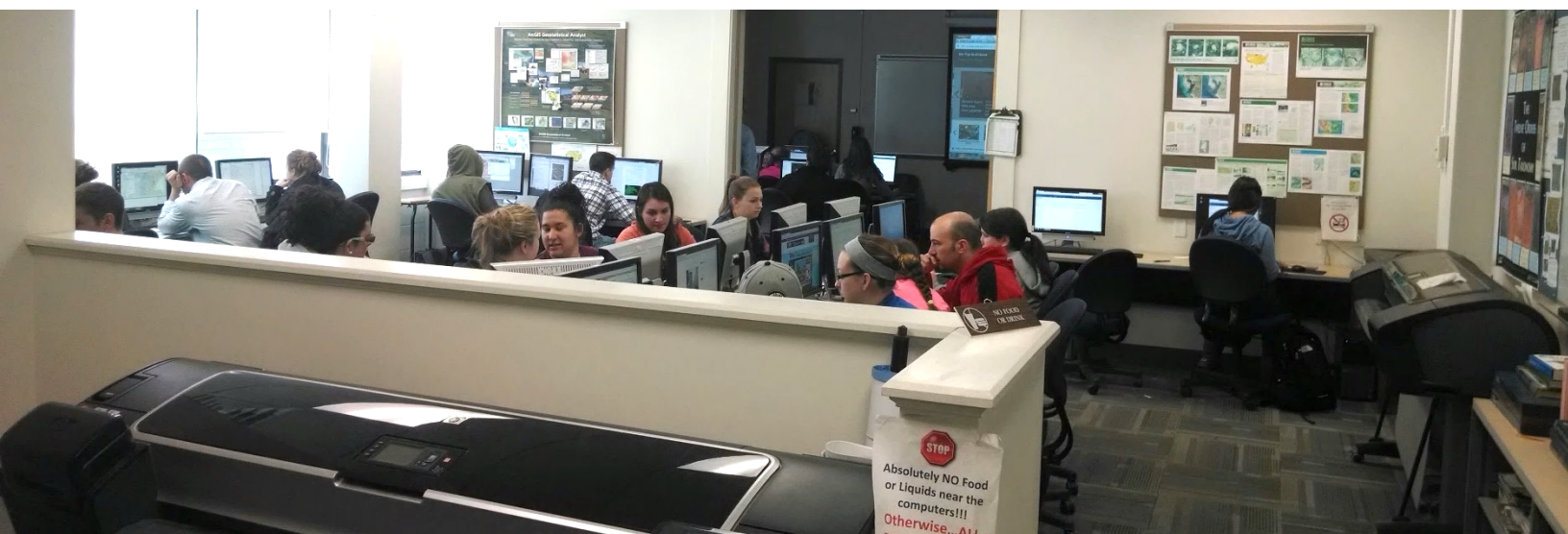
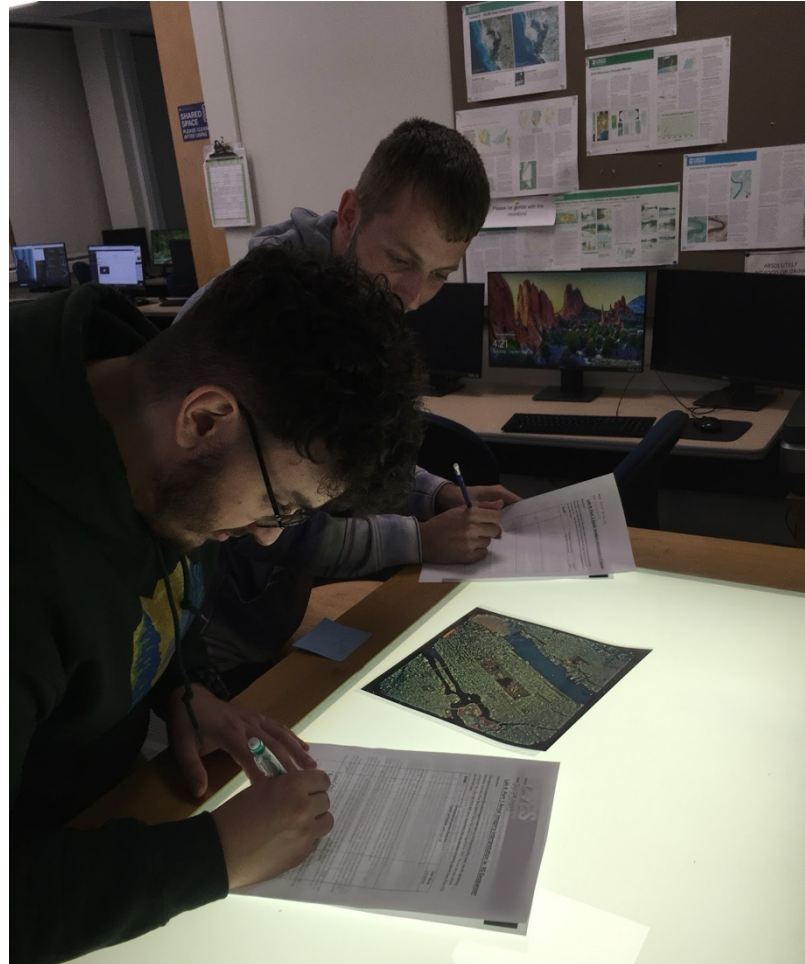


Digital Geography Lab (DGL)

The Digital Geography Lab (DGL) is regarded as one of the best academic geography-based computer labs in the country. This unique facility enables teamwork within the department and is a focal point for faculty, undergraduate and graduate research and is dedicated to serving and supporting students. The DGL offers an amazing opportunity for our students to work as a Lab Assistants.

Students in the DGL conduct research and work on projects such as:

- Climate change and beach erosion
- Geographic crime patterns
- How hazardous materials tend to be located in low-income neighborhoods
- Emergency management procedures
- Demographic and transportation analysis
- How human activity has changed the earth
- Economic impact analysis
- Tourism development
- Community identity and festivals
- Off-shore wind energy



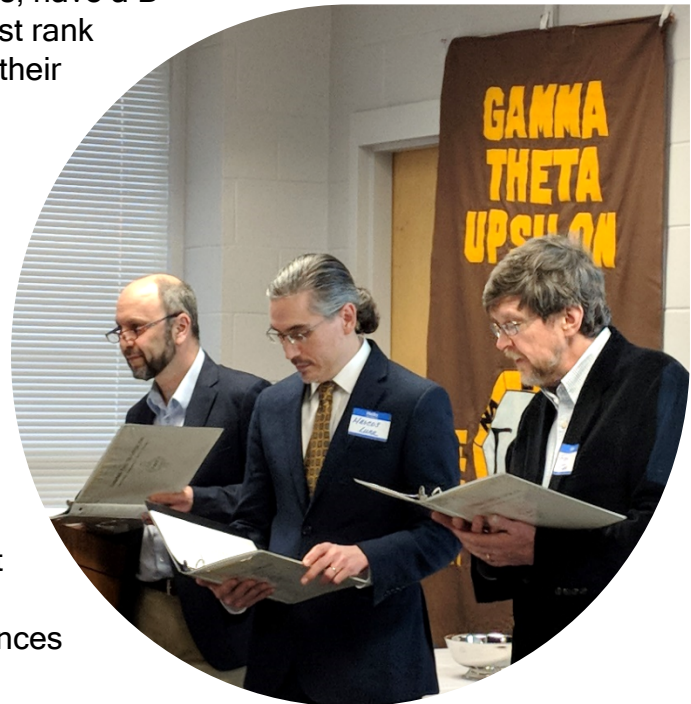
06. Student Opportunities

Gamma Theta Upsilon Honor Society (GTU)

Gamma Theta Upsilon (GTU), is an international honor society in geography. GTU activities support geography knowledge and awareness. Prospective members must have completed a minimum of three geography courses, have a B average in geography, must rank in the upper 35 percent of their class and shall have completed at least three semesters of college course work.

Goals of GTU

- ❖ To further professional interest in geography by affording a common organization for those interested in the field
- ❖ To strengthen student and professional training through academic experiences in addition to those of the classroom and laboratory
- ❖ To advance the status of geography as a cultural and practical discipline for study and investigation
- ❖ To encourage student research of high quality and to promote an outlet for publication
- ❖ To create and administer funds for furthering graduate study and/or research in the field of geography.



Membership is open to both undergraduate and graduate students. New GTU members at Salem State are inducted during the annual Geography Day Awards Ceremony in the spring. During this ceremony, outstanding students at the Geography and Sustainability Department are given scholarships and awards as a token of recognition.

Annual Scholarships and Awards

Scholarships
<ul style="list-style-type: none">➤ Dr. John George Memorial Scholarship➤ Ken Saro-Wiwa Climate Justice Scholarship➤ SSU Social Justice Scholarship
Awards
<ul style="list-style-type: none">➤ National Council for Geographic Education for Outstanding Academic Achievement in Geography➤ James J. Centorino Memorial Award for Superior Academic Achievement in Geography➤ J. Michael Ruane Award for Excellence in Digital Cartography➤ Graduate Student Award for Excellence in the Geo-Information Sciences➤ Dr. John George Memorial Award for Scholarship and Service in Geography

Finding an Internship

The Geography and Sustainability Department strongly encourages each student to have an internship. The internship provides employment related to his/her course of study and may be paid or unpaid. Many interns are offered full-time employment upon graduation from the place where they had their internship.

The best time to take an internship is during the summer between the junior and senior year or during the senior year. Faculty members in the department maintain ties with businesses, organizations and government agencies that provide internships and paid employment.

Start your search early (*preferably in the semester that precedes the internship*), as certain industries and internship programs have early deadlines.

- ❖ First, identify your career interests and goals. Then seek out prospective organizations for internship opportunities that relate to your career goals and interests.
- ❖ Contact employers about internship opportunities. Introduce yourself and sell your skills and explain how you can contribute to the organization’s success.
- ❖ Check Career Services at Salem State.
- ❖ Search the internet for internship programs.
- ❖ Network with friends, alumni, faculty, etc.

Civic Engagement is an important component in the Geography and Sustainability Department as our students are often doing internships with cities, towns, environmental NGO’s, among other engaging activities with the broader community.

An internship requires a faculty advisor in the Department - this responsibility is performed by many faculty members, who often advise students for internships in the domains of expertise and classes that they teach. Sustainability Council Internships are also available each semester. Information on this is found [here](#).

Events and Activities

Students and professors from the Geography and Sustainability Department are very active in organizing and participating in academic and professional events. Some examples follow.



Earth Days @ SSU

Earth Day is an annual event celebrated around the world on April 22 to demonstrate support for environmental protection. First celebrated in 1970, it now includes events coordinated globally. Since 2000, Salem State University has dedicated one week of events every year to celebrate Earth Day.

Earth Days Student Poster Competition - This is the only judged poster competition on campus. Any class at 200-level or higher is able to submit posters on the Earth Days Week theme. Approximately 100 research posters, submitted by SSU students in many disciplines, are judged

in the morning of the first day of the event. The Geography and Sustainability Department is involved in the organization of the event, and students from our department frequently win several awards in this competition.

The campus community from alumni to the board of trustees to the administration to faculty to students are strongly committed to sustainability. Program highlights include:

- ✓ 5 rooftop solar arrays
- ✓ 5 LEED certified buildings
- ✓ Divested from fossil fuels in 2018

Multi-School Fossil Fuel Divestment Fund Releases \$57,000 to Salem State University

Salem State University – the only institution from the 30 participating schools in the Multi-School Fossil Free Divestment Fund (MSFFDF) to fully divest from fossil fuels – received all of the funds holdings on April 11th 2019. As no other participating school in the MSFFDF divested by the end of the December 2018 deadline, Salem State University was awarded with 30 schools' escrowed donations.

The fund was established in 2014 to collectively pressure universities to divest from fossil fuels. The MSFFDF allowed parents, alumni, faculty, staff, students, and others to leverage their donations to help participating universities do the right thing. On May 24th 2018 Salem State University announced it had sold the universities' prior holdings in Carbon 200 (fossil fuel companies). This decision followed a five-year campaign by University students, faculty and alumni.



Geography and Sustainability Department Professor Noel Healy stated, “Now more than ever it’s critical that universities take a moral stand against the obstructionism of the fossil fuel industry”. Divestment, he added, is “a tactic, which can be employed by individuals, organizations, and institutions to hold fossil fuel companies responsible for nearly 40 years of climate deception and harm”.



To celebrate SSU’s leadership in tackling climate change Salem State established two endowed annual student scholarships: (1) The Ken Saro-Wiwa Climate Justice Scholarship and (2) The SSU social justice scholarship. Student interested in applying for these scholarships must possess an interest in climate justice or social justice as demonstrated by past and present activism (on and off campus), volunteering, professional, and educational experiences. Winners are chosen on the basis of their commitment to climate and social justice.

Ken Saro-Wiwa Climate Justice Scholarship (\$500)

The “climate justice” award is named after Nigerian activist Ken Saro-Wiwa. Ken Saro-Wiwa led a peaceful movement for the environmental and human rights of Nigeria’s Ogoni people whose oil-rich land has been exploited by multinational oil companies. In 1990 Saro-Wiwa



dedicate his time to organizing non-violent movement for social and ecological justice. Sadly the Nigerian government executed Saro-Wiwa in 1995. Ken Saro-Wiwa’s life has provided a legacy of great inspiration for human rights and environmental activists around the world. Posthumously Ken Saro-Wiwa was awarded the Goldman Environmental Prize and the Right Livelihood Award. Salem State University is privileged to dedicate this scholarship in his honor.

SSU Social Justice Scholarship (\$500)

Applicants for the social justice award should demonstrate how they seek to improve the living and working conditions for less advantaged members of their community in concrete and sustainable ways. This may involve work through a NGO or less formally structured activity (e.g. activism). Examples include students tackling racial justice, immigrant rights, incarcerated people’s rights and education etc.

To learn more about it, please contact [Prof. Noel Healy](#).

Darwin Festival @ SSU



The Salem State University Darwin Festival was started in 1980. The week-long festival honors the extraordinary impact Darwin's work has had on so many areas of human endeavor. This unique lecture series brings scientists and their research to undergraduates and others in the university and wider community. Our department is also involved in the organization and frequently brings the keynote speaker for the event. In the picture you see Dr. Nathan Philips (center), Acting Director of the Sustainable Neighborhood Lab in the Earth and Environment Department at Boston University, after his talk in the Darwin Festival 2020.

New England-St. Lawrence Valley Geographical Society – NESTVAL

The New England-St. Lawrence Valley Geographical Society contributes to the advancement of geography by holding a fall annual conference, publishing a peer-review professional journal, The Northeastern Geographer, and recognizing and supporting geography professionals and students through awards and annual activities.

The New England-St. Lawrence Valley Geographical Society is a regional division of the American Association of Geographers.



NESTVAL 2019 - Salem State Student Team won the NESTVAL Geography Bowl First Place.

NESTVAL 2020 - the Geography and Sustainability Department at Salem State University will host the very first virtual edition of NESTVAL, due to the global pandemic crisis caused by Covid-19. Professors John Hayes and Stephen Young are serving as the Local Program Committee!

"Pizza in Paradise"

'Pizza in Paradise' was a fundraiser ran by students who took "Special events" class with Professor Lorri Krebs. The students raised over \$1500 cash for our Salem State Food Pantry, raised awareness of food security on campus, in addition to providing free hot pizza and fun activities to over 200 students



Guest Speakers and Visits



Campus tour with Tara Gallagher, Sustainability and EH&S Coordinator, Office of Campus Planning and Facilities Management, SSU.



Visiting the City of Salem Planning and Community Development Department, welcomed by Planning Director Tom Daniel.

Fun while working! In the Geography and Sustainability Department we are happy because we love what we do. We have fun while working! Join us!



07. Meet our Team

Academic Staff – Full-time Faculty

Nicholas Geron
Assistant Professor

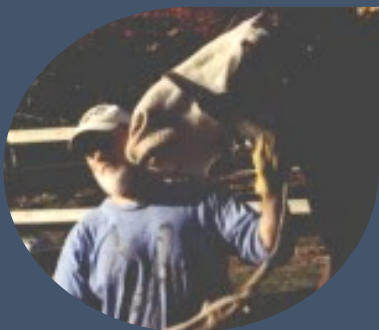


Professional Biography

Professor Nicholas Geron is an assistant professor of Geography and Sustainability at Salem State University with a focus on remote sensing, GIS and drone applications. He examines how these technologies can be applied to urban forestry and climate resilience. He is motivated by working with communities to address environmental and climate justice concerns using remote sensing/GIS technologies. Professor Geron has worked with municipal and state agencies, non-profits, and individual residents to examine the equitable distribution of urban tree planting in mid-sized cities. He believes in undergraduate students being involved in his research at every level from data collection to co-writing papers.

Professor Geron got his Bachelors at Boston University where he doubled majored in Environmental Policy and Analysis and French Literature. He got his Masters in Science Education at Lehman College CUNY while he taught high school Earth Science and French for five years. Professor Geron got his PhD in Geography at Clark University in Worcester, MA. During his doctorate, he worked as a visiting instructor at The College of the Holy Cross where he taught GIS, Remote Sensing, Environmental Science, and Urban Forestry.

William Hamilton
Professor



Professional Biography

Holds BA, MS, Ed.M and Ph.D degrees. Over 35 years teaching experience spanning elementary to post doctoral education. Held high level positions in and currently consults with Fortune 100 companies in GEOINT applications. While at SSC developed seventeen new courses, acquired funding and created the Digital Geography Laboratory, created the Masters in Geo-Information Science, and the Ph.D. in Geo-Information Science. Widely published in books, proceedings, journals, and software applications and has earned several awards for GEOINT curricula development and integration. Current research endeavors are time-space modeling and systems development for anti-terrorism bio and chemical warfare initiatives and applied spatial modeling in economic geography. Professional Interests: Spatial Mathematics, Quantitative Geography, Cartography, Applied Data Analysis, Geographic Information Science, Digital Image Processing (Hyperspectral, Lidar, Radar) and Close Range Photogrammetry

John Hayes
Associate Professor



Professional Biography

Dr. John Hayes is a physical geographer who teaches courses in physical geography, natural resource management, meteorology, global climate change, global environmental issues, and EIA. He has also taught courses on soils and water resources management. He teaches and advises in the Department's M.S. program in geo-information science. He received his Ph.D. and M.A. in Geography from UCLA and his B.A. in Geography (with a math minor) from Bowling Green State University. His recent research includes: 1) an assessment of the role of soil carbon and soil management techniques to mitigate climate change; 2) a critical review of municipal climate action planning by selected cities and towns; 3) an analysis of the physical and human dimensions of the Hydro-Social Cycle; 4) a diagrammatic approach for the study of positive and negative feedbacks in the climate system; and 5) the role of carbon offsets in climate change policy. Prof. Hayes has served as Vice President and President of the New England-St. Lawrence Valley Geographical Society (NESTVAL), as Regional Councilor on the American Association of Geographers' governing AAG Council, and is now serving on the AAG's Climate Action Task Force. Prof. Hayes served with Prof. Steven Silvern as co-editor for the inaugural first and second years of NESTVAL's peer-reviewed annual journal, The Northeastern Geographer. Prof. Hayes is a member of the city of Salem's former Renewable Energy Task Force and now Sustainability, Energy, and Resiliency Committee (SERC).

Noel Healy

Professor



Professional Biography

Dr. Noel Healy's research, teaching, and activism focus on responses to the climate crisis and normative dimensions of rapid climate change mitigation. His core work revolves around climate change politics, global climate governance, energy transformations, supply-side climate policy, energy justice, and the link between academic knowledge, political activism, and policymaking. Dr. Healy's projects have secured over \$175,000 in research grants and have spanned Ireland, the US, China, Germany, and Latin America. Dr. Healy is a contributing author for the IPCC (2018-2022). He was also appointed to the editorial board of Energy Research and Social Sciences (2019-2021). In 2015 Dr. Healy acted as an observer to the 2015 UNFCCC talks in Bonn and at the UNFCCC COP21 Paris talks. Dr. Healy is also a Ludwig-Maximilian University (LMU) of Munich Rachel Carson Fellow. Dr. Healy founded the SSU Fossil Fuel Divestment campaign and the SSU Faculty For Divestment group. A four-year campaign led SSU to commit to divest from fossil fuels in 2016. Noel teaches classes such as "saving the world: social justice in an era of climate change" and "Global Climate Change". Any SSU students seeking research experience are welcome to join Noel's climate and energy justice research group. Noel has co-authored publications with SSU undergraduates. Noel is actively involved in climate activist groups (e.g. fossil fuel divestment and Green New Deal) and social justice groups (e.g. Witness For Peace, Colombia). He is the faculty advisor to "Sunrise Salem". Noel was awarded a SSU Civic Engagement Hall of Fame award in 2018.

Lorri Krebs

Department Chair and
Professor



Professional Biography

Dr. Lorri specializes in sustainability and tourism, regional economic development, experiential learning, and climate resiliency. She holds a Master's degree with a concentration in ecosystem approaches, parks, and protected areas, and a Ph.D. with a focus on tourism technology, marketing, and decision-making. With extensive international experience in Switzerland, Mexico, and Canada, Dr. Krebs brings a global perspective to her teaching, research, and professional practice.

As Executive Director of Salem State's Center for Economic Development & Sustainability (CEDS), Dr. Krebs leads grant-funded initiatives that partner with non-profit organizations, municipalities, and regional stakeholders to advance economic development, data analysis, and sustainable strategies across Massachusetts and beyond. Her current research explores the intersections of climate change, tourism, and sustainability, with an emphasis on experiential learning, resilience, land use planning, ecotourism, and workforce development. She is also pursuing future research on sustainable energy transitions and environmental resiliency.

A dedicated educator, Dr. Krebs teaches both undergraduate and graduate courses in community development, tourism, and economic geography. She also leads regional and international travel seminars, providing students with transformative learning opportunities in destinations such as Peru, Morocco, Spain, France, Greece, and Walt Disney World. In addition, she teaches graduate GIS courses in computer modeling and supervises student internships with leading industry partners including the Hawthorne Hotel, Destination Salem, North of Boston CVB, Mohegan Sun Casino, Foxwoods Resort, and numerous hospitality and community organizations.

Through her teaching, research, and community engagement, Dr. Krebs is committed to bridging academia and practice—helping students, communities, and organizations develop innovative strategies for sustainable tourism, economic resilience, and climate adaptation.

Marcos Luna

Professor



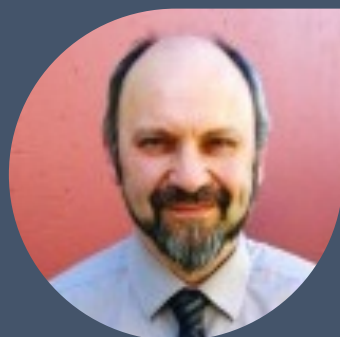
Professional Biography

I received my Ph.D. in Urban Affairs and Public Policy with a concentration in Technology, Environment and Society from the University of Delaware in 2007. I received my M.A. in Geography from California State University, Los Angeles in 2000. Before coming to Salem State University, I worked as an Environmental Analyst for the Massachusetts Department of Environmental Protection, and before that, as a GIS consultant for Native American tribes in the Southwest and Northwest. In addition, I have held research assistantships in grant-funded remote sensing and spatial analysis projects and have participated in various health and environmental public service projects in Massachusetts, Delaware and California.

Professional Interests: My areas of expertise and interest include GIS analysis, Environmental Justice, Energy, Environmental History, and Social Justice and Inequality. I am particularly interested in applications of geospatial technology to environmental sustainability and environmental justice challenges. I am also interested in histories of landscape, environmental change, and perception. I am currently working on a project to document and understand how seasonality was represented and understood in early America, and how those representations or perceptions did, and did not, correspond with local geographic realities. I teach undergraduate courses on Geographic Information Systems (GIS), map interpretation and cartography, Energy and the Environment, and Environmental Justice, as well as graduate courses on GIS and its applications to analysis and research. I serve on the University Graduate Education Council, the Earth Days Planning Committee (as webmaster), and I am the Geography Department's liaison for the Gamma Theta Upsilon (GTU) International Geographical Honor Society.

Steven Silvern

Professor



Professional Biography

B.A. Clark University; M.A. University of Illinois-Urbana; Ph.D. University of Wisconsin-Madison

Professional Interests: I am a cultural-political geographer whose primary research interests have centered on Native American Geographies, Geography of Food Systems and the Geography of Israel and the Middle East. Much of my recent work has centered on mapping the food systems, CSA, and a study on the geography and characteristics of Community Supported Fisheries. A second project I am working on is the study of the Jewish food movement. This project is unique in that it will focus on issues relating social justice, food justice and community identity to local and sustainable food systems. I am currently working on historical context, theoretical idea formation and some data collection for this project. I am also working on a paper examining the politics of place and photography in the Israel/Palestinian conflict and academic geography's representations of Israel/Palestine, Zionism, the BDS movement and Anti-Semitism.

Taru

Associate Professor



Professional Biography

Dr. Taru is an urban planner, designer, and educator whose work bridges academic research, applied planning, and community-centered resilience. With over a decade of experience in the United States, India, and Ghana, she focuses on hybrid governance, participatory planning, and equitable approaches to land use, housing, and climate action. Her Ph.D. research at the University of Michigan examined institutional hybridity during India's COVID-19 lockdown, while extensive fieldwork in Ghana and anti-eviction research in Detroit provide a comparative perspective on displacement, plural governance, and rights-based planning.

Before joining Salem State University as an Assistant Professor in the Department of Geography & Sustainability, she served as Principal Resilience Planner at the Central Massachusetts Regional Planning Commission. In that role, she led major climate resilience and decarbonization initiatives for the Greater Worcester MSA, including municipal vulnerability preparedness projects and comprehensive climate action plans. Through this blend of scholarship and practice, she advances innovative, community-driven strategies for sustainable land use, circular economies, and just climate transitions.

Academic Staff – Adjunct Faculty

Brian Cacchiotti



Professional Biography

Brian Cacchiotti is a graduate of our department, earning a degree in Cartography and GIS in 2001. He returned to Salem State in 2007 as an adjunct professor. He is a physical geographer, focusing on the physical processes that shape the world and society. His research focuses on wind power as a sustainable source for energy production in the US and world. Primarily, Brian can be found in the Weather and Climate lab or the DGL where he specializes in teaching W&C Lab and Maps and GIS. Since 2005, Brian along with his wife, Framingham State University Professor Judith Otto, have led student trips to Europe for Spring Break and summer travel course for Massachusetts k-12 teachers. Exploring the world is the very best way to discover greater knowledge of the world and a deeper depth of human understanding. Their motto, Bringing the world to you, means the world to us! Brian is co-founder of Geography Trips, a student-centered travel enterprise. He is a member of the American Association of Geographers and NESTVAL.

Anthony LaVerde



Professional Biography

Anthony (Tony) LaVerde is a visiting instructor in the MS Geo-Information Science program, teaching Spatial Database Design and GIS Software Development using Python. He has over 15 years of experience building and managing Geographic Information Systems, large spatial data infrastructure networks, designing spatial databases, and developing geo-processing tools and applications. He is currently the GIS Manager for the Town of Wilmington, Massachusetts. In this capacity, he is responsible for developing, maintaining, and managing the spatial data that is relied on, both in the office and in the field by vital community service providers such as the Wilmington Department of Public Works and Wilmington Fire Department. This includes building and managing GIS datasets for the drainage, water, and sewer utility networks for the entire community. Tony is a graduate of both the MS Geo-Information Science (2018) and the BS Cartography & Geographic Information Systems (2004) programs at Salem State University. He is also a FAA Part 107 licensed UAV (drone) pilot, and has a GISCI certification from GISCI.

Jacob Silverio



Professional Biography

Jacob Silverio is a Visiting Lecturer at Salem State University, Massachusetts. He graduated from Lyndon State College, Vermont with a B.S. in Meteorology. He received his M.S. in Environmental Studies with a Concentration in Atmospheric Science from the University of Massachusetts at Lowell. Professional Interests: New England weather, particularly heat waves and winter precipitation; Severe weather, including recent tornado outbreaks; Climate Change and Sustainability; Weather

Richard O’Gara



Professional Biography

Richard O’Gara has a B.A. in Geography from Boston University with a concentration in Energy and Environment, Analysis and Policy. He earned his Masters in GIS from Salem State University. Mr. O’Gara has more than 30 years experience developing, analyzing, and visualizing large infrastructure and environmental geographic data sets for the public and private sectors. He enjoys working with geospatial data models, asset management, and sustainability. He provides technical services and guidance on a wide variety of topics ranging from forensics to cloud-based field inspections.

Mr. O’Gara is currently teaching GIS and research methods classes at Salem State University, and working for PEER Consultants, where he is working on projects involving storm water modeling, GPS data conflation, photovoltaic power plant siting, and light rail expansion projects.

Jeffrey Pearlman



Professional Biography

Jeff Pearlman is an adjunct professor at Salem State University. As a regional geographer, he specializes in teaching courses such as Introduction to Geography, New England Geography, European Geography, The Geography of Canada, as well as the Geography of the United States. Mr. Pearlman taught public school in Revere, MA. for 36 years and retired in 2005. He is committed to sharing his expertise with students as well as making them more informed about their geography, history and world affairs.

Since 1985, Pearlman has also taught history courses as an adjunct professor at Bunker Hill Community College in Charlestown, MA.

Professional Interests: Jeff Pearlman is an active member in the Revere Society for Cultural and Historical Preservation. He often writes and lectures on local history and is concerned about saving historical buildings for future generations. He is also a member of the Colonial Society of Massachusetts and often attends lectures at the Massachusetts Historical Society.

George Waddington



Professional Biography

Mr. Waddington has 32 years of experience in the commercial application of geospatial technology to address the needs of agricultural monitoring, forest inventory, environmental remediation, water quality analysis, and national defense.

Before moving into the classroom at SSU, Mr. Waddington was responsible for maintenance, QA/QC testing, and management of the airborne sensor systems deployed for agricultural monitoring around the world by Aeroptic/GeoVantage. Other roles in his career include: Senior Quality Assurance Engineer at Applied Analysis Inc., where he managed the quality assurance for all image processing software & imagery-derived map products; Product Manager/Engineer at Emerge, Inc., where his focus was on the technical development of the image production system to ensure consistent agricultural monitoring product quality; Senior MTS at TASC, Inc., overseeing image data processing & product generation activities for the precision agriculture program; Senior Remote Sensing Scientist at CROPIX, Inc., responsible for all image processing & GIS activities for generating crop acreage & condition reports.

Mr. Waddington completed an M.S. degree in Environmental Engineering at SUNY College of Environmental Science and Forestry, studied satellite imagery for watershed mapping.

Academic Staff – Faculty Emeritus

Stephen Matchak
Professor Emeritus



Professional Biography

B.A., University of Hartford in Philosophy, M.A., University of Wales, Aberystwyth in Welsh, M.A., University of North Carolina in Folklore, Ph.D., University of North Carolina in Geography. I have been employed at Salem State since 1986. From 1982 to 1986, I worked for the Massachusetts Data Center at the University of Massachusetts in Amherst, MA

I have developed several professional interests that I have kept alive over the years. The longest standing interests have been in folklore and the cultural landscape. Folkloric interests pre-date my career as a geographer and, these days, center on New England. I am interested in studying the folkloric contribution of the pre-industrial culture to today's landscape as well as the ethnic and cultural diversity of the region. Reading the cultural landscape is another long standing interest that originally drew me into geography as a discipline. I find that the richness of the cultural landscape fascinating.

I am interested in experiential education through study/travel seminars. I have been a group leader on over forty international and a handful of domestic trips. The domestic trips have focused on the American Southwest and all the international trips have been to either Canada or Europe. Many of these seminars have been run with a colleague from the History Department, and they are themed on broad an important topics such as World War I and World War II.

Keith Ratner
Professor Emeritus



Professional Biography

Dr. Keith A. Ratner specializes in urban geography, urban and transportation planning, and GIS implementation and development. He joined the Department of Geography at Salem State College in 1999 upon completing his PhD in Geography at the University of Denver. Prior to entering the University of Denver, he obtained a Master of Regional Planning from Penn State University, and a Bachelors of Science in Natural Resource Development from Michigan State University. He worked for eleven years as a professional planner in New England at the local, regional and state levels of government. His research projects since arriving at Salem State have included an investigation into the regionalization of transportation planning north of Boston, the use of three dimensional data for the determination of road lengths for federal reporting requirements, the analysis of regional development changes related to transit oriented development in Denver, Colorado, and the success and failure of track sharing between passenger and freight railroads.

Stephen Young
Professor Emeritus



Professional Biography

Professor Young uses remote sensing (satellite imaging) to analyze climate change and deforestation. He received his Ph.D. in geography from Clark University, a master's degree in environmental science from Yale University and a B.A. in environmental studies from the University of Vermont. His geographic areas of expertise include northeastern North America and China. He has published over 30 peer-reviewed scientific articles and books. His research has brought him to more than 60 countries. In addition to his academic research, he bridges the arts and sciences through art gallery exhibitions which try to expose the public to science and geography. His exhibition Macro or Micro? (with Salem State University Biology professor Paul Kelly) has been displayed at over a dozen galleries including the Museum of Science in Boston, MA, the Centre des congrès de Québec in Quebec City, Canada, and at the Sazmanab Institute of Contemporary Art in Tehran.

Technical/ Operations Staff

Robin Champa
Administrative Assistant



Professional Biography

Robin Champa attended North Shore Community College and has 2 Associates Degrees in General Studies and Office Technology. She has been with Salem State University for over ten years. In addition to dedicating herself to the Geography and Sustainability Department, Robin is also an office assistant in the Geological Sciences Department. Before joining our department, Robin was devoted to the Nursing Department, running the testing for the students while also proctoring their exams.

Kym Pappathanasi
DGL Systems Manager



Professional Biography

Kym Pappathanasi received her degree in Geography and Cartography at the University of Vermont. After completing her Graduate Certificate in the Cartographic Sciences at Salem State the following summer, she became a Cartography Instructor at Salem State. The following year she accepted the Systems Manager position, and for the last 28 years she has been supervising and managing the Digital Geography Lab at Salem State University.

We are all working towards your success!



8. Preparing for a Career in Geography

If you want to make a difference to the world, studying geography is a great place to start. Geography careers offer opportunities to develop solutions to some of the society's most pressing problems, including climate change, natural disasters, multicultural integration, urban expansion, and environmental sustainability. There are numerous career possibilities with a degree in geography and the undergraduate majors, concentrations, and minors offered by the Geography and Sustainability Department at SSU are designed to prepare students for careers in several different areas. The flexibility and diversity of a geography degree makes graduates highly sought after in the work force.

Geographers may find career opportunities in a variety of work sectors. There are possibilities in state and local government offices, federal agencies, and international organizations. Many geographers find work in private businesses or as consultants to businesses. Also, geographers may pursue the possibility of teaching or researching at a university, or teaching at the primary or secondary level, each requiring additional years of study at the graduate level.



- Some **SSU graduates** pursue further education in graduate or professional schools while others directly enter the work force. Recent **SSU graduates** have gone on to work for ESRI, U.S. NPS, U.S. Census Bureau, among other organizations.
- Geographers are classified by the U.S. Department of Labor as a "**Bright Outlook**" occupation.
- The U.S. Department of Labor projects "**much faster than average**" growth, in excess of 20 percent or more, in jobs for geographers, geoscientists, cartographers, urban and regional planners, and other geographic professionals.
- Geospatial technology is considered to be a **high growth industry** by the U.S. Department of Labor.





Sample Job titles of Geographers

The analytical and research skills gained from your geography degree are attractive to a range of employers. Career opportunities for geographers also exist in specialized areas such as remote sensing and aerial photography, resource evaluation, urban and regional planning, industrial location, marketing resources, transportation and cartography. Today's competitive job market demands that students possess the knowledge, skills, and relevant job experiences that will set them apart from other applicants.

Find below a sample of job titles related to your degree:

Jobs directly related to your degree:	Jobs where your degree would be useful:
Aerial Photo Interpreter	Astronomer
Cartographer	Economic Development Analyst
Climatologist	Editorial Assistant
Commercial/residential surveyor	Health Planner
Community Development Specialist	International aid/development worker
College Professor	Landscape architect
Ecologist	Law Enforcement
Emergency Management Planners	Logistics and distribution manager
Environmental Analyst	Market researcher
Environmental Consultant	National Security
Geographer	Nature conservation officer
Geographic Information Systems Analyst	Political risk analyst
Planning and development surveyor	Space Exploration
Political Analyst	Sustainability consultant
Recreational Resources Manager	Tourism officer/Tour Guide
Remote Sensing Analysts and Specialists	Trade Analyst
Researcher	Transportation Planner
Secondary school teacher	
Urban/Land Use Planner	

The wide range of transferable skills acquired through a Geography degree, such as communication and team working skills is now widely recognized by an increasing number of employers. As a result, a large number of our graduates go into careers not obviously related to Geography. These include international banking, accountancy, Law, advertising, marketing, local & national government, and journalism. Geography's diversity and skills building base is its strength in both academic and career terms.

Additional Information

To learn more about career opportunities in geography, please contact your geography undergraduate advisor or you can check out the following links:

- **American Association of Geographers** [Jobs and Careers](#)
- **U.S. Department of Labor/Bureau of Labor Statistics** [Geography Jobs](#)
- **Cartography and Geographic Information Society** [Careers in Cartography and GIS](#)

Additional Career Resources

- **SSU Career Services** <https://www.salemstate.edu/careers>
- **Jobs in Geography at Earthworks, Jobs.com** <http://www.earthworks-jobs.com/geog.htm>
- **GeoSearch, Inc.** <http://www.geosearch.com>
- **GISJobs.com** <https://www.gisjobs.com/>



Geography and Sustainability Department



352 Lafayette Street, Salem, MA 01970



(978) 542.6225



lkrebs@salemstate.edu



Webpage | <https://www.salemstate.edu/academics/college-arts-and-sciences/geography-and-sustainability>

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