

# HP Class Guide Spring 2025

November 4, 2024



Georgia Tech  
**Honors Program**

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## Interim Director and Associate Director's Note

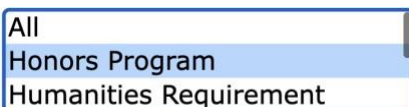
November 4, 2024

Dear HP Students,

Greetings, I hope your fall semester is going well. Hard to believe, but it's time to plan your HP curriculum for spring 2025. Phase I registration for fall runs from November 11 – December 13, 2024 and Phase II runs from January 2 - 10, 2025. The first day of the spring semester is Monday, January 6, 2025. Make sure to attend the [HP Registration Rescue information session](#) on November 7, 2024.

Please check out the HP class options listed in this guide and on the [HP website](#). You'll find great HP classes taught by dedicated faculty on a wide variety of engaging and timely topics. There is also an awesome feature in [OSCAR](#) that will allow you to search for Honors Program classes being offered. Select "Honors Program" from the Attribute Type menu and it will bring up the HP classes that are being offered (make sure to select at least one subject first—selecting all subjects will bring up every HP class).

**Attribute Type:**



All
Honors Program
Humanities Requirement

**Click here to find  
HP classes.**

**Here are some IMPORTANT NOTES about some spring HP lab science classes:**

1. We are offering HP sections of BIOS 1108, CHEM 1212K, PHYS 2211, and PHYS 2212 with affiliated Honors Program labs. **You must register for both the HP lecture and HP lab.**
  - a. The lecture and labs for CHEM and PHYS are linked in OSCAR—you will ONLY be able to sign up for the HP lecture and linked HP lab.
  - b. The lecture and lab for BIOS are not linked in OSCAR—you must select the correct HP lecture and lab class. **If you do not take both the HP section of the lecture AND lab for this class, you will not get credit for either of them!**

In addition, please consider your options to earn HP-authorized credit for these non-HP courses:

- [music ensembles](#),
- [research courses](#) (VIP, PURA, independent faculty-mentored research, usually with the number 2699 or 4699), and
- [study abroad courses](#) (HP-authorized)

As always, please work with your GT Academic Advisor to choose options that bring you the benefits of HP-style learning and that work for your GT major degree.

If you ever have questions or concerns, don't hesitate to contact me at [amy.dunger@gatech.edu](mailto:amy.dunger@gatech.edu). Have a fantastic conclusion to your fall semester and good luck with spring registration.

Regards,



Dr. Amy D'Unger

## APPH 1050 HP: The Science of Physical Activity and Health

**Dr. Christie Stewart**

**2 credit hours**

**50 HP seats**

Students will learn the importance of health, physical activity, nutrition, stress management, mindfulness, and chronic disease prevention through discussion of health/well-being concepts and current health research and trends. Students will form teams for a semester-long project relating to leadership and campus well-being.

The activity portion of the course will focus on a specific physical activity mode (weight lifting or yoga) to improve overall fitness. You must sign up for the lecture and ONE of the physical activity sections.

Dr. Christie Stewart is an Academic Professional in the School of Biological Sciences. She received a Bachelor of Science in Movement Science from the University of Pittsburgh and a Master of Education in Clinical Exercise Physiology from the University of Georgia. Most recently, she received her Doctorate in Educational Leadership from Mercer University. Prior to her current position, Christie worked as Associate Director for Healthy Lifestyle Programs at the Campus Recreation Center, where she worked closely with the School of Applied Physiology to help create the activity sections for APPH 1050.



Her research interests include the culture of health/well-being on college campuses and health/well-being and academic success. Christie and her colleague, Lesley Baradel, developed the class Flourishing: Strategies for Well-Being and Resilience in response to the campus community's need for additional education and support for well-being and resilience.

**Lecture:** M, 9:30 AM  
Curran Street Deck 210 (LLC West Commons Classroom, across the street from Eighth Street South apartments—enter under the blue awning)

**Physical Activity:** W, 8:25 AM  
Campus Recreation Center

**CRN (lecture- HP):** 27460  
**CRN (Weight Lifting- HPW):** 27461  
**CRN (Yoga- HPY):** 27462

**BIOS 1108 HP: Organismal Biology**  
**BIOS 1108L HP: Organismal Biology LAB**

**Dr. Linda Green & Dr. Robbie Richards (lecture) and Dr. Colin Harrison (lab)**

**3 credit hours/1 credit hour**

**12 HP seats**

**Please note:** You **MUST** register for the HP lecture and lab sections, or you will not get credit for either. ***They are not linked in OSCAR, so please select the correct sections.***

In this course, you will learn how your biology is similar – and different – to the biology of all life on Earth. We will explore the evolutionary history of all life on Earth through the lenses of development and reproduction, signaling and communication, and physiology and organ systems. As we explore the diversity of life on Earth, you'll be able to identify biological patterns and explain how you both are similar and different to the breadth of diversity of life on Earth. You will also develop scientific skills in analyzing and interpreting scientific data to test hypothesis and communicate scientifically. Finally, you will develop and practice skills in metacognition to identify your best learning strategies that you will be able to employ in your future courses and career. By the end of this course, you will be able to:

1. Identify and explain patterns in organismal biology in the context of evolutionary history, growth and development, cell signaling and communication, and organ systems and physiology (Course lecture content)
2. Explain and interpret biological experiments, and analyze and interpret biological data (Research Connections assignments)
3. Communicate effectively using appropriate scientific language in class settings (Research Connections and Scientist Spotlights assignments)
4. Appreciate commonalities and differences among people who practice science, and recognize that there are multiple pathways into science as a career (Scientist Spotlight assignments)

This course will foster your learning by using reflective practice, accentuate your critical thinking skills, and develop your confidence in soliciting guidance when problem-solving.

**Dr. Colin Harrison** is a Senior Academic Professional in the School of Biological Sciences. He earned his Ph.D. in Genetics and Molecular Biology at Emory University and B.S. in Genetics at the University of Wisconsin. He studies biology education research with a focus on laboratory learning, instructor language, and science identity. His research interests include STEM education, developmental biology, and genetics.



**Lecture:** M/W/F 11:00 AM  
Bill Moore Student Success Center 152

**Lab:** TH, 12:30 PM  
Clough 475

**CRN (lecture- HP):** 34856  
**CRN (lab- HP):** 32759

**CHEM 1212K HP: Chemical Principles II**  
**CHEM 1212K H04: Chemical Principles II LAB**

**Dr. Joseph Sadighi & Dr. Michael Evans (lecture) and Dr. Deborah Santos (lab)**

**4 credit hours**

**16 HP seats**

**Please note:** You MUST register for the HP lecture and lab sections or you will not get credit for either.

**Prerequisites:** CHEM 1211K or CHEM 1310

Welcome to Chemical Principles II! This course will help you develop facility with fundamental models of chemical reactivity, analysis, and structure. Broadly, the course covers chemical kinetics, chemical equilibrium and applications thereof, electrochemistry, and the chemistry of transition metal complexes. Through video lectures, active problem solving in class, and hands-on exploration in the laboratory, we hope you'll develop the ability to see chemical principles in your future courses and careers.

**Dr. Deborah Santos** is a recent addition to the School of Chemistry and Biochemistry and will head up the first-year chemistry labs. She grew up in the Metro Atlanta area and has attended and taught in several schools and universities prior to coming to Tech. She received her PhD in Chemistry Education from Georgia State University this year and an MS in Organic Chemistry from the University of Georgia in 2015. She was a high school chemistry teacher prior to earning her PhD and has current research interests in how students learn to “do” science. Her PhD work focused on the psychological aspects of learning chemistry (mindset and motivation) and her MS work involved developing chemistries for attaching carbohydrates and proteins to polymer surfaces for biological applications.



**Lecture:** M/W/F, 8:25 AM  
Klaus 1443

**Lab:** TH, 12:30 PM  
Clough 572

**CRN (lecture- HP):** 31319

**CRN (lab- H04):** 29275

## CHEM 3700 HP: Alternative Energy

**Dr. Thomas Orlando**

**3 credit hours**

**10 HP seats**

**Prerequisites:** CHEM 1211K or CHEM 1310 and CHEM 1212K and PHYS 2211 and PHYS 2212

This course will give a general overview of the most popular and most promising alternative energy solutions which are currently being used or developed to help relieve the world dependence on fossil fuels. The course will also discuss and explore how and where the various alternative energy options can be most effectively employed within the current energy landscape. The basic scientific principles governing the current and future approaches in solar photo-voltaics, fuel cells, biomass conversion, nuclear energy, smart-grids, wind power, etc. will be presented. Though the course will focus on the basic principles and fundamental science underpinning the current advancements in energy technologies, there will also be an emphasis on understanding the economic, political, and general sustainability issues associated with the most popular alternative energy options. Due to the interdisciplinary nature of the topic, the course will involve multiple guest instructors from across the campus, and in-class discussions among the participating students from different majors will be a significant component of the learning experience.

**Dr. Thomas Orlando** is a Regent's Professor in the School of Chemistry and Biochemistry at Georgia Tech. He received his PhD from the State University of New York-Stony Brook and had postdoctoral appointments at Associated Western Universities, the Solid State Sciences Division of Sandia National Labs, and the Institut für Physikalische Chemie at Universität Wien. His research focuses on electron- and photon-stimulated interface and surface processes, environmental chemistry and planetary surface science, and biophysical chemistry.



**Lecture:** T/TH, 9:30 AM  
Ford ES&T L1105

**CRN:** 34040



## COE 3002 HP: Intro to Microelectronics and the Nanotechnology Revolution

**Dr. John Cressler**

**3 credit hours**

**11 HP seats**

COE 3002 develops the general scientific and engineering underpinnings of microelectronics and nanotechnology and examines how this new technological revolution is influencing a broad array of interdisciplinary fields (engineering, biology, biomedical engineering, material science, chemistry, physics, medicine, technology, management) and civilization as a whole (art, business, film, entertainment, politics). Special “widget deconstruction” topics will address common pieces of modern technology (e.g., smart phone, flash drive, GPS, DVD, digital camera, etc.) from the perspective of: “How do they do what they do?”; “How does microelectronics & nanotechnology play in that functionality?”; and “Where is the technology going and how will it change the way we live our lives?” This is a very conversational class. Student-led team debates and class discussion threads will examine the transformational impact of the microelectronics and nanotechnology revolution on modern society. A team “widget deconstruction” project will serve as a capstone for the course. No special knowledge of electrical and computer engineering is assumed. This class will be highly interactive and student participation is key.

**Dr. John D. Cressler** is Regents Professor, Schlumberger Chair Professor in the School of Electrical and Computer Engineering, and the Ken Byers Teaching Fellow in Science and Religion. The basic thrust of Cressler’s research is to develop novel micro/nanoelectronic devices, circuits and systems for next-generation applications within the global electronics infrastructure. In addition to his academic duties, Cressler writes historical fiction, love stories set in medieval Muslim Spain that celebrate the era of *convivencia* (coexistence), a unique period when Muslims, Jews, and Christians lived together in harmony. He is deeply interested in the on-going dialogue between science and religion, and teaches the popular IAC 2002, “Science, Engineering and Religion: An Interfaith Dialogue,” each spring, open to all GT students. Cressler was awarded the 2010 Class of 1940 W. Howard Ector Outstanding Teacher Award (Georgia Tech’s top teaching award), and the 2013 Class of 1934 Distinguished Professor Award (the highest honor Georgia Tech bestows on its faculty). Visit him at: <http://users.ece.gatech.edu/~cressler> (research) and <http://johndcressler.com> (books).



**Lecture:** T/TH, 2:00 PM  
Kendeda 230

**CRN:** 34040

## **COS 3801 HP: Special Topics: Introduction to Model Organisms**

**Dr. Eduardo Gigante**

**1 credit hour**

**5 HP seats**

This introductory course will provide a general overview of model organism use in human health research. Leveraging my expertise in Developmental Biology and Neuroscience and through exposure to primary research articles, students will learn how model organisms are being used to solve today's foremost human health problems. Each week, we will focus on a different model organism, ranging from the single-celled, flagellated green algae *Chlamydomonas* all the way to non-human primates. During this course, students will discover topics such as evolutionary biology, experimental genetics, gene editing, and developmental biology. Moreover, we will discuss the importance of research ethics when using model organisms, as well as the pros and cons of alternative models like organoids. Students will be responsible for engaging in classroom discussions and completing in-class assignments that test their critical thinking and problem-solving skills. Students will be given seminal review articles related to each species, for unrequired reading.

**Dr. Eduardo Gigante** is a postdoctoral researcher in the School of Biological Sciences at Georgia Tech. He earned a BS and MS from Binghamton University in New York. He then spent three years at the National Institute on Drug Abuse in Baltimore, Maryland studying neural pathways of food and drug addiction. He did his PhD work at Emory University, using a mouse model of embryonic development to study the intersection of primary cilia and neural tube patterning. Eduardo's hobbies include running, cooking, woodworking, home brewing, and sharing those hobbies with his family and friends.



Dr. Gigante has acted as a research mentor for more than 10 years and has teaching experience includes serving as a TA at Binghamton University, Emory University, and Cold Spring Harbor Labs.

**Lecture:** T, 12:30 PM  
Clough 272

**CRN:** 35046

**CS 1301 HP: Introduction to Computing (ONLINE, ASYNCHRONOUS)**  
**CS 1301R HPR: Introduction to Computing Recitation (ONLINE, SYNCHRONOUS)**

**Dr. David Joyner**

**3 credit hours**

**24 HP seats**

**Please note:** You must register for the lecture and recitation separately. Lecture is online and asynchronous. Recitation is online and synchronous.

The purpose of this online course is to give students an introduction to computer programming. Students will gain experience and practice with logical thinking and debugging. The focus in the course is on developing skills and experience in software development and use of software tools. No prior CS coursework is required. The HP section will be limited to 50 students and will include a recitation session led by a CS TA. On four occasions, Dr. Joyner will attend the recitation session. It is **STRONGLY RECOMMENDED** that you register for the recitation section.

Dr. David Joyner has a passion for leveraging new technologies to improve student learning. He focuses on online learning not through MOOCs, but through large online classrooms. He is interested in the unique opportunities these classes have for personalizing student learning and granting students greater ownership and autonomy over their education. He's seen incredible things happen with online learning at the graduate level and is excited to extend those opportunities to undergraduate students. Dr. Joyner completed his Ph.D. in Human-Centered Computing at Georgia Tech. He now works for the College of Computing as its Associate Director for Student Experience. Dr. Joyner also teaches in the OMSCS program, teaching CS6460: Educational Technology, CS6750: Human-Computer Interaction, and CSE6242: Data and Visual Analytics. He also runs an online research lab: [lucylabs.gatech.edu](http://lucylabs.gatech.edu).



**Lecture:** online, asynchronous

**Recitation:** TH, 5:00 PM  
online, synchronous

**CRN (online lecture- HP):** 25632

**CRN (online recitation- HPR):** 27271

## EAS 1601 HP: Habitable Planet EAS 1601 W1H: Habitable Planet LAB

**Dr. Frances Rivera-Hernandez (lecture) and Dr. Mike Porter (lab)**

**4 credit hours**

**24 HP seats**

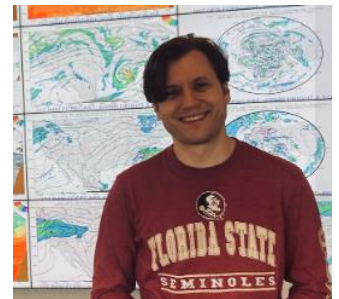
**Please note:** You MUST register for the HP lecture and lab sections, or you will not get credit for either.

Introduction to the origin and evolution of Planet Earth, creation of the universe and the elements, early history of Earth, radioisotope geochemistry and the timing of events in the universe, the galaxy, and on Earth. Formation of the atmosphere and oceans. Climate.

**Lab objective:** Lab is designed to enhance foundational concepts associated with the lecture course: How to Build and Maintain a Habitable Planet. Labs are a hybrid of hands-on experiments/activities and online work via the adaptive learning platform Argos. Focus will be on understanding the underlying science of the course, application of the scientific process, and improving communicating / evaluating projects motivated by scientific evidence through the final lab project. What you can expect in Lab:

- **Conduct data measurements and calculations**—being able to conduct simple measurements and calculations to evaluate methods, data, and data implications is just as important as the broad concepts in evaluating implications;
- **Utilize experimental and modeling methods**—labs, and science, are conducted via multiple methods depending on the topic, and in this class, many large-scale system concepts are better adapted to computer models;
- **Final Lab project**—Working in groups, you will research and evaluate an exoplanet in order to create a mission proposal to present. This will apply your accumulated knowledge from lecture and labs and give practice to working collaboratively and communicating science.

**Dr. Michael Porter's** studies and career have been shaped by a passion for understanding and explaining the natural and constructed world. Consequently, his credentials and work experiences cover a range of physical and social sciences. He has shown kindergartners how to interpret satellite data, organized/led STEM summer programs for secondary teachers and students, forecasted for and flown on NASA research aircraft, led mission-oriented time-crunched teams in both education and broadcast settings, and helped conceptualize and secure multi-million dollar research projects. Through his diverse subject-expertise and skillset, he has been deconstructing complex systems and making them decipherable to different audiences. His research agenda centers on intentionally harnessing big data sets to offer bias correction of current weather forecasts. NOAA provided him access to SREF (Short Range Ensemble Forecasting) Super Ensemble data for his development of the Retro-Ensemble, a post processing technique that maps onto SREF. Beyond generating new knowledge, he enjoys science communication in both classroom settings and in front of greenscreens. Sustainability drives his worldview as he has been a vegetarian, hybrid-owner, and composter for decades.



**Lecture:** T/TH, 2:00 PM  
Scheller 100

**Lab:** W, 8:00 AM  
Kendeda 288

**CRN (lecture- HP):** 35053

**CRN (lab- HPL):** 20603

## EAS 3110 HP: Energy, Environment, and Society

**Dr. Jairo Garcia**  
**3 credit hours**  
**10 HP seats**

This interdisciplinary seminar-style course relies on guest speakers from across the Tech campus and beyond, encouraging lively discussion of both current events and past developments relevant to our nation's energy and climate future. The main student activity will be a semester-long "Carbon Reduction Challenge", in which student teams compete to reduce carbon footprints by the end of the semester.

**Dr. Jairo Garcia** is an expert in urban sustainability and climate change. Dr. Garcia is the CEO of Urban Climate Nexus, the North America Curator for United Nations Habitat, a Sustainable Development Goals Educator Fellow, and long-term collaborator and lecturer at Johns Hopkins University and The Georgia Institute of Technology. Dr. Garcia is the former Director of Climate Policy with the City of Atlanta and the lead author of Atlanta's Climate Action Plan. He received the 2017 Individual Climate Leadership Award by the EPA, and the 2021 Green Ring Award by the Climate Reality Project for this demonstrated an exceptional commitment to climate communications and climate action activism. His areas of research are in urban climate vulnerabilities with a focus on urban heat and food security.



**Lecture:** M/W, 2:00 PM  
Instructional Center 205

**CRN:** 30989

## ECON 2100 HP: Economics and Policy

**Dr. Danny Woodbury**  
**3 credit hours**  
**10 HP seats**

In this class, you will:

1. Learn the “Microeconomics” tools designed to help you understand the functioning of various markets (e.g., goods and services, labor, financial).
2. Examine selected economic policy issues (e.g., taxation, immigration, education, health, environmental regulation).
3. Briefly focus on some key “Macroeconomic” topics, such as: measuring GDP, business cycles, monetary policy (money supply, interest rates), fiscal policy (government revenues and expenditures, taxes), unemployment and inflation. We will briefly examine the current macroeconomic events.

This course is mainly about practice in analysis of decision problems of relevance to students in public policy and personal decision areas. Issues relating to individual decisions to produce, consume, invest, and trade will be explored. Analytical approaches will enable students to use and incorporate basic elements of micro- and macro-economic analysis and to appreciate issues regarding testing and measurements. The objective is to be able to apply economic concepts to new problems. This skill is best developed through practice. The discussion of readings, homework problems, and in-class exercise are intended to provide this. The exams will focus on an ability to apply economic tools of analysis to specific situations and not memorized facts.

**Dr. Danny Woodbury’s** training and primary research focus is in public finance, especially pertaining to issues unique to state and local government. As an educator, he seeks to provide students with an active learning environment allowing for the development of skills in economic reasoning that will serve them well beyond the classroom. Danny received his PhD from the University of Kentucky in 2018 and joined the School of Economics at Georgia Tech in 2023. His research has appeared in *Public Finance Review* and *International Tax and Public Finance*.



**Lecture:** M/W, 11:00 AM  
Molecular Sciences and Engineering 1222

**CRN:** 34862

## ECON 4370 HP: Law and Economics

**Dr. Whitney Buser**  
**3 credit hours**  
**10 HP seats**

Law and Economics is a discussion heavy course where we will answer the question what does Economics have to do with judicial law? Using the rigors of economic analysis of decision making we will examine why criminals might be rational, why the efficient number of accidents is not zero, and why a lot fewer people get married these days. Each day's new topic will be presented for small group discussion and analysis before a larger whole class conversation. Topics include contracts, property rights, accidents and torts, family and gender laws, and criminal activity. Guest speakers will include patent lawyers, litigators, and legislative representatives. Instead of a final exam, students will work in groups and use data science to propose optimal changes to an existing inefficient law.

**Dr. Whitney Buser** is a Senior Academic Professional and Director of Master's Programs in the School of Economics at Georgia Tech. Dr. Buser has published and presented research on gender differences in financial literacy, performance evaluation, confidence in mathematical abilities, and participation in academic discussions. Dr. Buser's work has appeared in *Sex Roles*, *Public Choice*, and *The Journal of Family and Economic Issues*, as well as other peer-reviewed publications. Further research interests include behavioral economics as well as formal and informal institutional impacts on policy and economic wellbeing. Prior to joining the faculty at Georgia Tech in 2020, Dr. Buser was the Chair of the Business and Public Policy Department at Young Harris College and as well as an Associate Professor of Economics.



**Lecture:** M/W, 9:30 AM  
Clough 129

**CRN:** 34863

## ENGL 1102 HP1: English Composition II

**Dr. Rachel Hartnett**  
**3 credit hours**  
**18 HP seats**

This is a seminar about how to write and communicate effectively. With a WOVEN approach, we will critically examine instances of argument, culture, and communication in Written, Oral, Visual, Electronic and Nonverbal modalities. Analyzing these modes individually and in combination, we will consider how best to generate ideas and adapt them for specific contexts and audiences. This seminar is therefore equal parts discussion group and workshop. Expect in each session to critique examples of communication and to develop your own communication projects (individually and in collaboration with your classmates).

This course will focus on the theme of “Muscogee Nation, Terminus, the City in A Forest, and Hot’Lanta: Exploring Questions of Self and Modernity through the Multiple Identities of Atlanta.” Atlanta is a city grounded in modernity (via the expansion of the railroad), rebirth (after the burning of Atlanta in Sherman’s March to the Sea), and resistance (the birthplace of Dr. Martin Luther King, Jr.). However, it is also a city—like the rest of the continental United States—built by the genocide and displacement of the indigenous inhabitants (the Muscogee Nation). Like many southern American cities, Atlanta is a city with a complex racial history. While Atlanta is home to the oldest and largest consortium of historically black institutions in the nation and has even been called the “black mecca of the South,” the city was the site of the 1906 Atlanta Race Massacre, and Fulton County experienced 36 racial lynchings between 1877 and 1950, making it one of the most affected counties in the state, which itself ranks second in the nation for racial lynchings. Atlanta has always been a city of overlapping—and often contradictory—identities. Through this course, students will learn about the history of the city and how it resists simple definitions or binaries. The city resists the concept of modernity/coloniality by its multiplicity and rebirths throughout the centuries. This rigorous intellectual engagement will provide a breadth of information to deepen student understanding of their academic home; build complex and thorough conversations in class about the intersections of race, class, politics, and self; and allow for student reflections on the nature of identity and self-determination. We will also develop public-facing, multimodal materials that will challenge students to engage with common rhetorical concepts such as rhetorical awareness, stance, genre conventions, and design for medium.

**Dr. Rachel Hartnett** is a Marion L. Brittain Postdoctoral Fellow in the Writing and Communication Program in the School of Literature, Media, and Communication at the Georgia Institute of Technology. She earned her PhD in English in 2023 from the University of Florida and her MA in English in 2016 from Florida Atlantic University. Her research interests include postcolonialism, U.S. empire, and popular culture. She has been published in the *Journal of Popular Culture and Tropical Imaginaries* and *Climate Crisis*, a special issue of *eTropic*. Her chapter, “Soucouyants and Storms: (Super)Natural Representations of the U.S. Military Occupation of Trinidad,” will be published in *The Palgrave Handbook of Monsters and Monstrous Bodies*, set to be released in 2026. She is currently working on a monograph, titled *Postcolonialism in A Song of Ice and Fire*, which will be a sustained analysis of race and imperialism in George R.R. Martin’s fantasy series.



**Lecture:** M/W, 11:00 AM  
Skiles 368

**CRN:** 28876



## ENGL 1102 HP2: English Composition II

**Dr. Lisa Wells Jacobson**

**3 credit hours**

**18 HP seats**

What's on TV—and why does it matter? With television as our main object of study, we'll work collaboratively and individually toward becoming more effective communicators. Each of our month-long projects will combine various WOVEN modes (Written, Oral, Visual, Electronic, and Nonverbal) toward a common purpose: presenting persuasive arguments about media. Together, we'll focus our rhetorical investigations on the medium of television. We'll engage in scholarly and cultural debates on questions such as: What is television today, and why is the label of "television" still relevant? What rhetorical strategies and techniques has television historically used to address its audience? How is television's address changing in a digitally connected world? And what can we learn from television's rhetorical strategies in order to further develop our own multimodal communication? We may also have opportunities to engage with Atlanta's vibrant television production industry.

Writing and research are at the heart of this course. Written communication will form the basis for multimodal research-based projects that may include individual blog posts, collaborative news opinion videos, and oral and audiovisual presentations. In this course, you will practice analyzing media objects, applying various methods and theories as well as your own research, and creating your own persuasive arguments. Giving and receiving feedback are also among the key skills we will be developing. Finally, on a metacognitive level, you will practice taking charge of your own learning through guided self-assessment.

**Dr. Lisa Wells Jacobson** is a Marion L. Brittain Postdoctoral Fellow in the School of Literature, Media, and Communication at Georgia Tech. She received her PhD from UC Berkeley's Department of Film & Media in 2022. Her scholarship asks how contemporary television writes history. Her current research project investigates how television spy serials set in the late Cold War dramatize discontent with today's digitally connected world by imagining a slower, more human-scale past. She is also researching the rise of openly anachronistic historical films and television in the "post-truth" era since 2016. Her writing has appeared in *New Review of Film and Television Studies* (as well as the journal's public-facing blog), *The Oxford Handbook of Global Realisms*, and *Film Quarterly*. In her capacity as a teacher as well as a scholar of media, Dr. Jacobson serves on the steering committee of the Critical Media Pedagogies Interest Group for the Society of Cinema and Media Studies and is co-editing a special issue of the *JCMS Teaching Media Dossier* on alternative grading practices.



**Lecture:** M/W, 2:00 PM  
Hall 103

**CRN:** 32585

## ENGL 1102 HP3: English Composition II

**Dr. Kaitlyn Smith**  
**3 credit hours**  
**18 HP seats**

Rhetoricians often conjure ghosts, ghouls, and monsters to influence their audiences through the power of fear. Why is fear such a powerful, controlling, and even addictive emotion? This rhetoric and composition course uses the theme of fear to explore how arguments can be constructed and expressed in a variety of modes. We will study ghosts and other horror creatures as manifestations of the social issues faced by the societies that produce them. We will also see how these spectres have jumped off the page through film, television, and video game reinterpretations of class horror tropes.

Major assignments will be multimodal literary and rhetorical investigations of one common fear and its consequences, from its origins to its contemporary remediations. Come prepared to be scared, as selections from horror and horror-adjacent material will be shown in class.

**Dr. Kaitlyn Smith** is a Brittain Teaching Fellow at the Georgia Institute of Technology. There, she teaches in the writing and communication program. She defended her dissertation, “Race and Technology in Southern Literature, Civil War to Civil Rights” at the University of South Carolina in 2022. Her research interests continue to lie at the intersection of narratives of progress and narratives of race in American literature, specifically southern regional literature. At Georgia Tech, she teaches composition and rhetoric-based courses about horror, technology, regional identity, or whatever else sparks her imagination.



**Lecture:** M/W, 3:30 PM  
West Architecture 258

**CRN:** 32702

## GT 2803 HP: Special Topics: Progress and Service Forum

**Dr. Kate Williams and Mr. Chad Slieper**

**3 credit hours**

**13 HP seats**

What is “Progress and Service” and how does Georgia Tech prepare leaders who advance technology and improve the human condition? In this course, you will explore the nature of complex problems that impact humanity while investigating your own unique potential to impact these problems. Through interactions with you with greater insight into the roles and actions that enable leaders to make change.

Upon successful completion of this course, students should have the foundational ability to:

- Integrate multiple perspectives in defining complex problems
- Reflect on their identity development as professionals
- Describe how their actions as professionals impact society

### **\*Leaders in Progress and Service: Georgia Tech’s Next Quality Enhancement Plan (QEP)**

This course will serve as a pilot in spring 2025 for the launch of a “foundations” course for Georgia Tech’s new QEP, now under development. Successful completion of the QEP educational sequence will result in the award of a new graduation distinction “*Leader in Progress and Service*” to be recorded on the Diploma.

The QEP educational sequence will require completion of a “foundations” course, three QEP-approved and faculty-mentored “immersive learning” experiences, and participation in a campus-wide Progress and Service Summit attended by invited experts, students, faculty, employers, and other community partners.

Learn more about the QEP at <https://oue.gatech.edu/quality-enhancement-plan>. More information about the QEP educational sequence will be provided by the course co-instructors in the first week of class.

**Dr. Kate Williams** serves as Faculty Co-Director of Georgia Tech’s Leadership in Progress and Service Quality Enhancement Plan (QEP) in the Office of Undergraduate Education. Kate joined the Center for Teaching and Learning at Georgia Tech in 2016 where she retains a partial appointment as Senior Academic Professional. Kate earned a Ph.D. in industrial-organizational psychology from Clemson University and an M.Ed. in student affairs from the University of South Carolina. A psychology instructor with a background in experiential learning, service learning, and career services, Kate has 25 years of experience in higher education in both faculty and leadership roles. She previously served as department head at a South Carolina community college where she gained expertise in faculty development and evaluation, curriculum assessment, and strategic planning. In the Center for Teaching and Learning at Georgia Tech, Kate has led a number of initiatives, including designing and facilitating the Tech to Teaching certificate program for graduate students and developing several faculty learning communities. In 2023, Kate launched a faculty development program to support the Transformative Teaching and Learning (TTL) strategic plan initiative.



**Mr. Chad Slieper** currently serves as Faculty Co-Director of Georgia Tech’s Leadership in Progress and Service Quality Enhancement Plan (QEP) in the Office of Undergraduate Education. He also retains a partial appointment as an Academic Professional in the School of Public Policy where he serves as Director of the Law, Science, and Technology program overseeing recruitment and retention of the program’s part-time attorney faculty. Having earned a Bachelor of Science in Public Policy with highest honor from Georgia Tech and a Juris Doctor from Emory University School of Law, he has over a decade of experience in higher education having previously held appointments with The University of Texas M. D. Anderson Cancer Center and Emory University School of Law where he directed a program in Global Health Law and Policy. An attorney and ethicist, he has leadership experience with curriculum development, program administration and development, faculty recruitment and retention, service and experiential learning, professional identity development, and student advising. He teaches in the fields of law and medical ethics, and he has won a number of teaching awards at Georgia Tech. In 2021, he was a Georgia Tech “Faces of Inclusive Excellence” honoree for his work as co-founder of the Ivan Allen College of Liberal Arts Diversity Council, and he also serves as a faculty liaison to Georgia Tech’s LGBTQIA Resource Center. A member of the State Bar of Georgia and former board member and secretary of the Stonewall Bar Association of Georgia, he also previously worked in the area of professional responsibility for two global law firms, and he was honored by the Georgia Tech School of Public Policy in 2013 with its Outstanding Alumni Award.



**Lecture:** F, 11:00 AM  
Clough 262

**CRN:** 34790

## HTS 3017 HP: Sociology of Gender

**Dr. Amy D'Unger**

**3 credit hours**

**25 HP seats**

**Please note:** Counts toward social sciences general education requirements.

This course is an introduction to the sociological study of gender. Our focus is on gender as a social construction that is negotiated through interaction and affects our social relationships and personal experiences. We examine the changes and maintenance of gender roles and identity and the ways in which gender and power are interconnected. We will begin the class with an examination of biological and socialization theories and investigate cultural and structural explanations for gender differences. We then analyze how gender impacts/is impacted by such social institutions as the family, work, education, medicine, and law. Throughout the course we will explore the intersections of gender with class, race, and sexual orientation. The assignments are designed to help you learn to think critically about the social construction of gender, to give you an introduction to sociological research, and to develop your skills in communicating clearly and convincingly during class discussions and in written work.

**Dr. Amy D'Unger** (PhD, Duke University, 1999) is a sociologist with interests in the areas of race, class, and gender; inequality; social policy; social control and eugenics; and crime. Her previous research has looked at the impact of neighborhood social disorganization, peer networks, family structures, and school ties on delinquency and crime over the life course. She is currently researching the role of eugenic (involuntary) sterilization in the South as a tool of informal social control, particularly during the Civil Rights Movement. Dr. D'Unger has published in such journals as the *American Journal of Sociology*, the *Journal of Quantitative Criminology*, and the *Encyclopedia of Crime and Justice* on topics such as criminal careers, gender and offending, and feminist criminological theory.



Dr. D'Unger has been recognized for excellence in academic advising by both Georgia Tech and the National Academic Advising Association, and has won teaching awards from both the Ivan Allen College of Liberal Arts and Georgia Tech. She is the past chair of the Division on Women and Crime of the American Society of Criminology. Dr. D'Unger currently serves as the Interim Director and Associate Director of the Georgia Tech Honors Program.

**Lecture:** T/TH, 9:30 AM  
Curran Street Deck 210 (LLC West Commons Classroom, across the street from Eighth Street South apartments—enter under the blue awning)

**CRN:** 34036

## HTS 3029 HP: Ancient Rome

**Dr. Juliana Viezure**

**3 credit hours**

**15 HP seats**

**Please note:** Counts toward social sciences general education requirements.

his course is an introduction to the ancient Roman world. It covers a period of almost one thousand years, from the foundation of the city of Rome, traditionally dated to the middle of the eighth century BCE, to the end of the Julio-Claudian dynasty in 68 CE. We will focus primarily on the city of Rome itself and on Italy, but we will also examine provincial perspectives and developments in the wider ancient Mediterranean world. We will work with a variety of primary sources (literary, epigraphic, numismatic, and archeological), and cover topics as diverse as politics, institutions, social life, religion, and economics. The course will include a game/simulation component ("Reacting To The Past") on the conspiracy of Catiline (63 BCE), in which students will assume roles of various 1st c. BCE characters and recreate the context of this momentous event in Roman history.

**Dr. Juliana Viezure** (Lecturer) is a historian of ancient and medieval Europe. Her research focuses on the development of Christian institutions and doctrine in the late Roman period. Dr. Viezure's interests include doctrinal conflicts, schisms, heresy and orthodoxy, and the negotiation of power between religious and imperial authorities. She has presented her work at national and international conferences, including the Byzantine Studies Conference and the Oxford Patristics Conference, and has contributed articles to *Studia Patristica*, *Hugoye: Journal of Syriac Studies*, *Histos: The On-line Journal of Ancient Historiography*, and several edited volumes. Dr. Viezure received her PhD from the University of Toronto, Centre for Medieval Studies, and her MA degree in Medieval Studies from the Central European University in Budapest.



**Lecture:** W/F, 9:30 AM  
Howey Physics S107

**CRN:** 34534

## IAC 2002 HP: Science, Engineering, and Religion

**Dr. John Cressler**

**3 credit hours**

**3 HP seats**

**Please note:** BY PERMIT ONLY. Class open only to students who previously submitted their applications for a permit to Dr. Cressler. If selected, you will hear from Dr. Cressler with further instructions.

Dividing lines exist within the rigorous, truth-seeking, intellectually demanding academic setting that defines Georgia Tech. I invite you to consider two examples. 1) Walls often separate science and engineering, on the one side, from religion and spirituality, on the other side. It is commonly assumed, for instance, that serious scientists and engineers cannot, by definition, be people of faith; and vice versa. Such matters are rarely, if ever, topics of conversation in classes. 2) Walls often separate the various religious traditions and world views that are represented in Georgia Tech's exceptionally diverse student body. For example, Christians often know very little about the beliefs and practices of Muslims, Jews about Buddhists, Taoists about Sikhs, Hindus about secular humanists. Meaningful dialogue between different religious traditions and worldviews on campus is uncommon, or perhaps only comes in response to some tragic event. Again, such matters are rarely, if ever, topics of conversation in classes. With Georgia Tech's strategic goal of graduating outstanding global citizens, it is my view that the educational experience Georgia Tech provides could be further enhanced by ensuring religious literacy and engaging meaningful dialogue across the boundaries of science, engineering, and religion, particularly within the context of interfaith diversity. After all, we live in an ever-flattening global community. This course is intended to help break down these barriers to meaningful dialogue in a creative way. The course will gather together a diverse set of students who are serious about their spiritual lives, and yet who are also studying hard to be Georgia Tech's next cadre of world-class graduates. Together, we will explore a variety of topics related to the intersection of science, engineering, and religion. No prior background is assumed. We will break open these topics by engaging in open and constructive dialogue.

**Dr. John D. Cressler** is Regents Professor, Schlumberger Chair Professor in the School of Electrical and Computer Engineering, and the Ken Byers Teaching Fellow in Science and Religion. The basic thrust of Cressler's research is to develop novel micro/nanoelectronic devices, circuits and systems for next-generation applications within the global electronics infrastructure. In addition to his academic duties, Cressler writes historical fiction, love stories set in medieval Muslim Spain that celebrate the era of *convivencia* (coexistence), a unique period when Muslims, Jews, and Christians lived together in harmony. He is deeply interested in the on-going dialogue between science and religion, and teaches the popular IAC 2002, "Science, Engineering and Religion: An Interfaith Dialogue," each spring, open to all GT students. Cressler was awarded the 2010 Class of 1940 W. Howard Ector Outstanding Teacher Award (Georgia Tech's top teaching award), and the 2013 Class of 1934 Distinguished Professor Award (the highest honor Georgia Tech bestows on its faculty). Visit him at: <http://users.ece.gatech.edu/~cressler> (research) and <http://johndcressler.com> (books).



**Lecture:** T/TH, 5:00 PM  
Clough 423

**CRN:** 30010

## INTA 3242 HP: Soccer and Global Politics

**Dr. Kirk Bowman**

**3 credit hours**

**5 HP seats**

**Please note:** Counts toward Award of HP Distinction in the Global Engagement Pathway and social sciences general education requirements.

Soccer is the undisputed global game and is an excellent lens to understand and explain our world. Soccer is also a powerful actor in forging identity, influencing norms, shaping migration, challenging colonization, contributing to economies, and much more. The beautiful game is a powerful tool to transform youth and marginalized communities including refugees, immigrants, the homeless, amputees, and others. This course examines the relationship between soccer and global politics around the world, with some emphasis on Latin America.

**Dr. Kirk Bowman** is Professor and Regents' Entrepreneur in the Sam Nunn School of International Affairs. He is the author of four books, most recently *Reimagining Global Philanthropy* (Columbia University Press, 2021). His current research examines the intersection of global soccer and society. He directs a Vertically Integrated Project (VIP) on Soccer, Community, Innovation & Politics (SCIP) that will host and direct the inaugural edition of Soccer Con with the Atlanta Conference on Soccer & Innovation in March 2023. He is co-founder and director of the international NGO Rise Up & Care.



**Lecture:** T/TH, 9:30 AM  
Habersham G17

**CRN:** 32812

## LMC 2500 HP: Introduction to Film

**Dr. Kristi McKim**

**3 credit hours**

**15 HP seats**

**Please note:** Counts toward humanities general education requirements.

“Be one on whom nothing is lost,” writes novelist and critic Henry James. This course applies this idea to the art of cinema: the closer we look, the more attentively we listen, and the more carefully we think about the ways film creates and is created within our worlds, then the more possibly we can learn new ways of, in fact, being “one on whom nothing is lost.” This course introduces students to the merits of closely studying films and expects that students will demonstrate the progress of this skill. We begin with the foundations of film form and structure (How do films construct characters and motifs?), after which we will study significant components of the cinematic medium: narration, camerawork, editing, mise-en-scène, and sound.

In the semester’s second half, we explore various ways of grouping films (e.g. documentary, historical time periods, national cinemas) to consider how critics and audiences organize film over time. Though this will be a class steeped in new terminology and analysis, these words and concepts catalyze rather than inhibit our appreciation of cinema. Given our focus on the medium itself, we will also think about the nature of our inquiry: how does our world replete with audiovisual media affect our capacity to live and be? This course hopes to expand perception, not only with regard to film as a history-rich complex discipline but also as it bears upon our existential world. Our histories are marked by impulsive superficial judgments about appearance, whether through “love at first sight” or racial violence, which have implications for human freedom and possibility. The heightened and sensitized perception that arises through studying film—an opportunity to slow things down, to take great care, to replay and appreciate the qualities that give rise to our joy, fear, pleasure, pain, discomfort, hope—suggests how film can be a microcosm and model for how we learn and live.

After this semester, you likely will never experience films the same; but this sensitized perception can enrich your relationship to the art and, ideally, the world. This course will include a field trip to the movie theater!

**Dr. Kristi McKim** is an Associate Professor of Film Studies in the School of Literature, Media, and Communication at Georgia Tech. Having taught college-level film classes for over 20 years, she’s thrilled to have recently made an enormous life change (just this past summer), in moving to Atlanta to begin her dream job at Georgia Tech, after an established career at Hendrix College. Her first book, *Love in the Time of Cinema*, explored how both film and love change our experience of time; and her second book, *Cinema as Weather: Stylistic Screens and Atmospheric Change*, catalogued and historicized memorable sequences of cinematic rain, snow, and sunlight. She has most recently published a book on Wes Anderson’s energetic coming-of-age film, *Rushmore*, and she’s continually interested in how movies enrich our experience of the world, through revealing details we otherwise might take for granted. She earned her Ph.D. from Emory University.



**Lecture:** T/TH, 12:30 PM  
Guggenheim 246

**CRN:** 34891



## LMC 3202 HP: Global Science Fiction

**Dr. Lisa Yaszek**

**3 credit hours**

**15 HP seats**

**Please note:** Counts toward humanities general education requirements.

The course explores science fiction (SF) as a global language that artists use to communicate their ideas about science and technology across centuries, continents, and cultures. We will begin by reviewing four major global circuits that have defined world SF for the past two centuries, with specific attention to their historical and cultural contexts. We will then explore how artists connect with each other and with audiences across these global circuits through their shared use of science fiction's fundamental building blocks, including the novum, future history, neologisms, imaginary science, and the technological sublime/grotesque.

**Dr. Lisa Yaszek** is Regents' Professor of Science Fiction Studies at Georgia Tech, where she explores science fiction as a global language crossing centuries, continents, and cultures. Her award-winning books include *Galactic Suburbia: Recovering Women's Science Fiction* (2008); *Sisters of Tomorrow: The First Women of Science Fiction*, and *The Future is Female! Classic Science Fiction Stories by Women* series (2018-present). Yaszek's ideas about science fiction as a window to cultural history have been featured in venues including *The Washington Post*, *Food and Wine Magazine*, and *USA Today*, and she has been an expert commentator for *CBS Sunday Morning*, the BBC4, Turner Classic Movies, and the AMC miniseries *James Cameron's Story of Science Fiction*. A past president of the Science Fiction Research Association and founding member of the Eugie Award for Short Speculative Fiction, in 2024 Yaszek received the SFRA Award for Lifetime Contributions to Science Fiction Studies.



**Lecture:** M/W, 2:00 PM  
Skiles 002

**CRN:** 34892

**MATH 1552 HP: Integral Calculus**  
**MATH 1552 HP1: Integral Calculus STUDIO**

**Ms. Klara Grodzinsky**

**4 credit hours**

**20 HP seats**

**Please note:** You MUST register for the HP lecture and studio sections or you will not get credit for either.

**Prerequisites:** MATH 1550 or MATH 1551

Math 1552, Integral Calculus, explores the meaning of the definite integral, various techniques of integration, and infinite series, including an introduction to Taylor and MacLaurin Series. Students will understand integration both geometrically and computationally. The idea of convergence will be applied to integrals and infinite series. Students will learn to analyze and apply various methods of integration and tests for convergence, construct Taylor series, and use Taylor polynomials as a form of numerical approximation. Students will also learn the proper usage of mathematical notation as related to the above topics.

**Klara Grodzinsky** received her M.S. degree in Applied Mathematics from Georgia Tech in 1996. She has been employed at Georgia Tech since September 1997, serving as an instructor until she was promoted to Academic Professional in January 2017 and Senior Academic Professional in July 2021. In 2000, she co-created a training program for graduate and undergraduate teaching assistants, which earned the Board of Regents Teaching Excellence Award in 2006 and has been used as a model for other campus departments. Since 2008, she has served as the TA Coordinator for the School of Mathematics. She earned the Center for Teaching and Learning Undergraduate Educator Award in 2011, the School of Mathematics Fulmer Teaching Prize in 2023, and won the institute-wide Class of 1934/1940 Course Survey Teaching Excellence Award seven times. In addition to directing the TA program, Ms. Grodzinsky has served as the course coordinator for MATH 1552 since 2015 and has taught a wide variety of 1000-level mathematics courses.

**Lecture:** M/W/F, 11:00 AM  
Clough 144

**Studio:** T/TH, 2:00 PM  
Skiles 257

**CRN (lecture- HP):** 32315

**CRN (studio- HP1):** 32316

**MATH 1553 HP: Introduction to Linear Algebra**  
**MATH 1553 HP1: Introduction to Linear Algebra STUDIO**

**Dr. Christopher Jankowski**

**2 credit hours**

**20 HP seats**

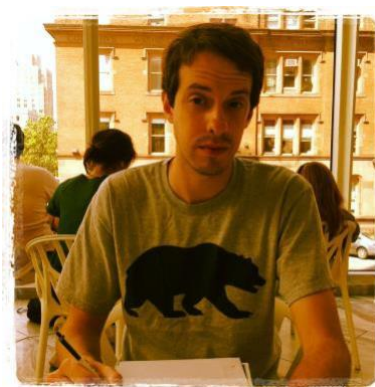
**Please note:** You MUST register for the HP lecture and studio sections or you will not get credit for either.

**Prerequisites:** SAT Math score of 600 or ACT Math score of 26 or MATH 1113 or MATH 1551

Linear Algebra is very conceptual compared to most mathematics courses that students have previously taken. By the end of this course, it is expected that students will be able to do the following.

- A) Solve systems of linear questions.
- B) Solve eigenvalue problems.
- C) Analyze mathematical statements and expressions (for example, to assess whether a particular statement is accurate, or to describe solutions of systems in terms of existence and uniqueness).
- D) Write logical progressions of precise mathematical statements to justify and communicate your reasoning.
- E) Apply linear algebra concepts to model, solve, and analyze real-world situations.
- F) Solve systems of linear questions.
- G) Solve eigenvalue problems.
- H) Analyze mathematical statements and expressions (for example, to assess whether a particular statement is accurate, or to describe solutions of systems in terms of existence and uniqueness).
- I) Write logical progressions of precise mathematical statements to justify and communicate your reasoning.
- J) Apply linear algebra concepts to model, solve, and analyze real-world situations.

**Dr. Christopher Jankowski** is a Senior Academic Professional in the School of Mathematics, where he serves as the Director of Graduate Advising and Assessment (DGAA) and Director of Postdoctoral Teaching Effectiveness. He earned his Ph.D. in Mathematics from the University of Pennsylvania. His main research interest lies in constructing and classifying  $E_0$ -semigroups (up to cocycle conjugacy) using the theory of CP-flows and boundary weight maps.



**Lecture:** M/W, 8:25 AM  
Howey Physics L4

**Studio:** F, 8:25 AM  
Skiles 156

**CRN (lecture- HP):** 31254

**CRN (studio- HP1):** 31255

**MATH 2551 HP: Multivariable Calculus**  
**MATH 2551 HP1: Multivariable Calculus STUDIO**

**Dr. Hunter Lehmann**

**4 credit hours**

**20 HP seats**

**Please note:** You MUST register for the HP lecture and studio sections or you will not get credit for either.

**Prerequisites:** MATH 1552 and MATH 1553, 1554, or 1564

Multivariable calculus is a comprehensive introduction to all aspects of calculus in two and three variables. Students will learn how to differentiate and integrate such functions, how to find their maxima and minima, and how to use Lagrange multipliers when there is a constraint. All the classical theorems are covered - Fubini's theorem on integration in several variables, Green's Theorem, Stokes' Theorem and Gauss' Divergence Theorem. The geometry of surfaces in space is discussed, as are physical applications such as centers of mass, circulation, flow, and flux.

**Dr. Hunter Lehmann** is an Academic Professional with the School of Mathematics at Georgia Tech. He is originally from Poulsbo, WA and completed his undergraduate degree in mathematics nearby at Seattle University. He did his PhD at the University of Kentucky in algebraic coding theory with Dr. Heide Gluesing-Luerssen. His research focuses on properties of orbit subspace codes.



**Lecture:** T/TH, 9:30 AM  
East Architecture 123

**Studio:** M/W, 12:30 PM  
East Architecture 107

**CRN (lecture- HP):** 31256

**CRN (studio- HP1):** 31262

## MGT 4193 HP: Servant Leader Value Systems

**Dr. Robert Thomas**

**3 credit hours**

**15 HP seats**

**Please note:** Counts toward Award of HP Distinction in the Service Pathway. This course is taught in Tech Square. Restricted to sophomores, juniors, and seniors only.

The philosophy of Robert K. Greenleaf outlined in his essays on servant leadership can be beneficial to students as they embark upon their career and future leadership roles. The concept of servant leadership is often misunderstood and discounted as a viable leadership model for the corporate world. However, Greenleaf emphasized the critical nature of institutions and described himself as a student of organizations. Servant leadership is defined as a philosophy of life and leadership dedicated to the growth of others and committed to building values-driven institutions that contribute to just, caring, and sustainable societies. Greenleaf placed emphasis on the role of values, personal introspection, and the ability of the servant leader to understand the environment in which they operate. He was also concerned with the methods used to achieve objectives.

**Dr. Robert Thomas** is Professor of the Practice in the Scheller College of Business. He joined Georgia Tech in January 2006 to develop curriculum and create programming for the Institute for Leadership and Entrepreneurship, an interdisciplinary unit that enhances leadership and entrepreneurship for socially responsible and sustainable value creation. He teaches courses in servant leadership, social entrepreneurship, and entrepreneurial finance. Prior to joining Georgia Tech, he served in senior leadership positions in industry, investment banking, financial services and academia. He has extensive experiences working with universities, foundations and non-governmental organizations in Central and Eastern Europe and has served as a member of the board of directors of numerous nonprofits and as Chair of the Board of the Greenleaf Center for Servant Leadership.



**Lecture:** T/TH, 11:00 AM  
Scheller 201

**CRN:** 32719

## **ML 2500 HP: Introduction to Cross-Cultural Studies: Think Globally, Act Locally (ONLINE, SYNCHRONOUS)**

**Dr. Kelly Comfort**

**3 credit hours**

**12 HP seats**

**Please note:** Counts toward Award of HP Distinction in the Global Engagement Pathway and humanities general education requirements.

ML 2500 aims to promote cross-cultural understanding through the comparative analysis of significant works of literature, photography, and film from around the globe as viewed through the lens of the United Nations' Sustainable Development Goals. The course will use Comfort's edited textbook, *A Global Humanities Approach to the United Nations' Sustainable Development Goals: Understanding, Planet, People, and Prosperity*, to examine five documentary films, two photographic collections, two novels, and one short story. The photographers, authors, and directors examined in the course hail from Argentina, Belgium, Benin, Brazil, Costa Rica, China, France, Germany, India, Japan, and the United States, while their works take us to many of these homelands and to additional nations such as Australia, Ecuador, Greenland, Haiti, Peru, Rwanda, and Senegal.

ML 2500 has two main objectives. First, it strives to train students with a disciplinary background in the humanities to understand, apply, and evaluate the UN SDGs and the concept of sustainable development. Second, it aims to teach students with a disciplinary background outside of the humanities to understand, analyze, and evaluate global humanities texts and their specific contributions—artistic, cultural, linguistic, etc.—to understanding and attaining a sustainable world. Upon completion of this course, students will be able to:

- Understand and evaluate the UN SDGs and ESD;
- Analyze and apply the UN SDGs to selected works of the global humanities;
- Evaluate works of the global humanities in terms of their contributions to promoting sustainability in terms of planet, people, prosperity, and partnerships;
- Create new global humanities texts to support the UN SDGs and/or design new applications of global humanities texts to the UN SDGs.

The ML 2500 course intentionally sets out to break down disciplinary boundaries and to combine humanistic, artistic, ethical, social, cultural, political, scientific, technological, environmental, and economic discourses.

**Dr. Kelly Comfort** received her PhD in Comparative Literature with a designated emphasis in Critical Theory from the University of California, Davis. She joined the Georgia Tech faculty in 2005. A specialist in Latin American literature and transatlantic modernisms, Dr. Comfort's research agenda focuses primarily on the intersections between Latin American modernismo and contemporaneous turn-of-the-century literary movements in Europe such as aestheticism and decadence. She is the author of *Cien años de identidad: Introducción a la literatura latinoamericana del siglo XX*, a textbook and anthology.



**Lecture:** W/F, 11:00 AM  
ONLINE, SYNCHRONOUS

**CRN:** 32375

## **Music Ensembles (1 credit hour)**

**MUSI 3018, 3019, 3121, 3131, 3231, 3241, 3251, 3261, 3311, 3321, 3411, 3511, 3531, 3541, 3551, 3611**

The HP is expanding its partnership with the School of Music and will now grant up to 3 HP credits for ensemble classes.

### ***Why take an ensemble class for HP credit?***

- Music ensembles are active-learning classes—“hands-on” and “voice-on”— a great fit for our curious, creative, and highly motivated HP students.
- Making music is a universal and uplifting human experience—a great fit for our times and all times.
- Non-music majors/minors earn humanities credits for ensemble classes, and each class may be repeated for humanities credit. [Here is additional information.](#)

## PHIL 3050 HP: Political Philosophy

**Dr. Michael Hoffman**

**3 credit hours**

**10 HP seats**

**Please note:** Counts toward humanities general education requirements.

Given the threats posed by increasing polarization, gridlock in decision making, and the growth of autocratic tendencies in the United States, this class focuses on the question of how democracy can be improved by revisiting contributions to the philosophy of democracy. Based on a reading for each class meeting, we will discuss various theories of democracies, including deliberative and more radical approaches; their challenges; and principles on which democratic decision making should be based.

**Dr. Michael Hoffmann** is a Professor for Philosophy in the School of Public Policy at Georgia Tech.

He is the Director of the [Reflect! Lab](#) and Co-Director of ETHICx, the [Ethics, Technology, and Human Interaction Center](#). His current research focuses on the development of the [Reflect! platform](#). Until recently, Hoffmann was the PI on the NSF project "Fostering self-correcting reasoning with reflection systems." This project is motivated by research that indicates that students hardly ever substantially revise the products of their reasoning, even if they are explicitly instructed to do so. The Reflect! platform will "orchestrate" collaboration within small teams of students, between teams and an instructor, and within a class. Working on a "wicked problem" such as the ethical challenges of facial recognition technologies, students are time and again confronted with new points of view so that they experience the limitations of their own perspective and the need for self-correction.



Dr. Hoffmann directs the [VIP Digital Deliberation](#) and the project [Digital Deliberation and Social Justice in the Digital Age](#). Both are supported by a grant from the [Digital Integrative Liberal Arts Center \(DILAC\)](#). In a previous project, Hoffmann developed the interactive and web-based argument visualization tool "AGORA" (see <http://agora.gatech.edu>). This project was supported by a grant from the U.S. Department of Education.

**Lecture:** M/W, 3:30 PM  
Clough 127

**CRN:** 31033



**PHYS 2211 HP: Introduction to Physics I**  
**PHYS 2211 HPL: Introduction to Physics I LAB**

**Dr. Emily Alicea-Muñoz 4 credit hours**

**30 HP seats**

**Please note:** You MUST register for the HP lecture and lab sections, or you will not get credit for either.

**Prerequisite:** MATH 1552

The M&I version of PHYS 2211 emphasizes the atomic nature of matter and integrates traditional mechanics with thermal physics. There is a strong emphasis on the Momentum Principle, the Energy Principle (the first law of thermodynamics), and the Angular Momentum Principle. The main goal of this course is to have students engage in a process central to science: the attempt to model a broad range of physical phenomena using a small set of powerful fundamental principles. To aid in this goal students will develop computational models that predict the motion of interacting objects. These models will be made using the Visual Python programming language. The course also emphasizes the atomic structure of matter, especially the ball and spring model of solids, and photon emission and absorption in quantized systems.

**Topics include:**

- The different types of matter and interactions found in nature
- Using the momentum principle to predict future motion
- An atomic model of solids
- The momentum principle in moving reference frames
- Energy conservation including relativistic energy
- Energy in macroscopic systems including thermal energy
- Multi-particle systems and the center of mass
- Collisions including relativistic particle collisions
- Angular momentum and quantized angular momentum
- Energy quantization and photon emission and absorption

**Dr. Emily Alicea-Muñoz** is a native of Puerto Rico. She has a BS in Physics from the University of Puerto Rico at Mayagüez, an MS in Astronomy & Astrophysics from Penn State, and a PhD in Physics with a doctoral minor in Higher Education from Georgia Tech. Before coming to Georgia Tech, she worked at NASA Goddard Space Flight Center where she studied cosmological black hole mergers. Dr. Alicea's research focuses on the professional development of physics graduate teaching assistants (GTAs). She is also interested in holistic assessments of teaching effectiveness, the development of expert-like problem-solving skills in introductory physics students, introductory astronomy education, and methods of informal education/outreach.



**Lecture:** M/W, 9:30 AM  
Howey Physics L1

**Lab:** M, 3:30 PM  
Clough 362

**CRN (lecture- HP):** 31153  
**CRN (lab- HPL):** 31157

## PHYS 2212 HP: Introduction to Physics II PHYS 2212 HPL: Introduction to Physics II LAB

**Dr. Ed Greco**

**4 credit hours**

**30 HP seats**

**Please note:** You MUST register for the HP lecture and lab sections, or you will not get credit for either.

**Prerequisite:** PHYS 2211

The M&I version of 2212 deals with electric and magnetic interactions, which are central to the structure of matter, to chemical and biological phenomena, and to the design and operation of most modern technology. The main goal of this course is to have you engage in a process central to science: the attempt to model a broad range of physical phenomena using a small set of powerful fundamental principles.

The specific focus is an introduction to field theory, in terms of the classical theory of electricity and magnetism. To aid in this goal you will develop computational models to visualize these fields and the interaction of charged particles. These models will be made using the Visual Python programming language (run in your browser at [www.glowscript.org](http://www.glowscript.org)). The course also emphasizes the atomic structure of matter, especially the role of electrons and protons in matter.

### **Topics include:**

- Matter and electric field, polarization of atomic matter
- Electric fields of distributed charges, setting up physical integrals, numerical integration
- Electric potential and energy for fields
- Magnetic field, atomic model of ferromagnetism
- A microscopic view of electric circuits, surface charge model
- Capacitors, inductors, resistors, and batteries
- Magnetic force, including motional emf
- Patterns of field in space (Gauss's and Ampere's laws)
- Faraday's law and non-coulomb electric field
- Electromagnetic radiation, including its production by accelerated charges and re-radiation

**Dr. Ed Greco** is a native Floridian who moved to Atlanta in 2000 with his high school sweetheart and earned his Ph.D. in physics from Georgia Tech on low Reynolds number flow in 2008. Since joining the faculty at Tech, Ed has been active in the development of new curriculum for undergraduate students. When not in the classroom, he coordinates the outreach activities for the school of physics and serves as radio show co-host "Fat Daddy Sorghum" on WREK's Inside the Black Box where he enjoys sharing his passion for science with the Atlanta community. Photography, Chess, Conchology, foraging for wild edibles, winemaking, and exploring Appalachia on a motorcycle are just a few of his varied pastimes. Mostly, however, he enjoys spending quality times with his loving family.



**Lecture:** T/TH, 9:30 AM  
Howey Physics L4

**Lab:** T, 3:30 PM  
Clough 383

**CRN (lecture- HP):** 32712  
**CRN (lab- HPL):** 32713

## PUBP 3350 HP: Energy Policy

**Dr. Daniel Matisoff**

**3 credit hours**

**15 HP seats**

**Please note:** Counts toward social sciences general education requirements.

Why do oil prices rise and fall? Will we ever "run out" of oil? Can we solve climate change without hurting American industry? What are the promises and pitfalls of renewable energy? Under what economic and policy conditions can renewable energy be competitive? Can America achieve energy independence? What does energy independence mean? How will carbon regulation impact American energy production? Why should we incentivize renewable energy production and how can we best design those incentives and regulations?

This course cuts through myths that are pervasive in the media, public opinion, and in statements by politicians. It will give you a theoretical basis from which to assess energy policy options, and an understanding of how global energy markets work, as well as an overview of domestic and international energy policy. The course seeks to build group project skills and students will produce a policy analysis of policy options related to an energy policy problem.

Through this course you will gain the tools to assess and analyze the market characteristics, policies, and regulations that impact the supply, demand, and impacts of energy consumption in the U.S. and abroad. This course will provide an overview of applied energy economics, energy regulation, basics of U.S. and global energy production / consumption, and policy options for promoting a sustainable energy future.

**Dr. Daniel Matisoff** teaches and conducts research in the areas of public policy, energy policy, and corporate sustainability. His research focuses on the effectiveness and efficiency of comparative approaches to addressing environmental problems and the adoption and diffusion of energy technologies and policies. He currently is a fellow with the Brook Byers Institute for Sustainability and is affiliated with the Strategic Energy Institute and Center for Urban Innovation. He has participated in over \$4 million of sponsored research through the National Science Foundation, the European Union Center for Excellence, the German Academic Exchange Service, the Georgia Department of Transportation, and the National Electric Energy Testing Research and Applications Center. His recent research has resulted in publications in the *Review of Environmental Economics and Policy*, *Environmental and Resource Economics*, *Energy Economics*, *Environmental Science and Technology*, *Energy Policy*, and *Business Strategy and the Environment*, among other outlets. His current research interests include: evaluating the effectiveness of voluntary eco-labeling programs; the effectiveness of incentives for solar electricity; the adoption of smart grid technologies and policies; and the impact of large-scale solar adoption on consumer rates and bills.



**Lecture:** T/TH, 9:30 AM  
Clough 129

**CRN:** 31271

## SPAN 4160 HP: U.S. Spanish- Languages and Cultures

**Dr. Osvaldo Cleger**

**3 credit hours**

**10 HP seats**

**Please note:** Course is taught in Spanish. Counts toward Award of HP Distinction in the Global Engagement Pathway and humanities general education requirements.

**Prerequisites:** SPAN 2002 or AB/IB equivalent

Spanish 4160 is a course designed to help students develop their research and methodological skills through the study of the cultural and literary production of Latina/o immigrants in the United States. Throughout the semester, students will become familiar with different migratory process by individuals from the Latin American region, as well as the cultures these groups have established in the U.S. These processes will be studied in their historical dimensions and through their various cultural manifestations, such as journalistic articles and chronicles, poems, songs, memoirs, novels, television shows, documentaries, paintings, graphic arts, plays and performance art projects. All works, artifacts and other objects of study are cultural productions created by Latina/o migrants living in the U.S. The theoretical framework studied in class will include notions such as “cultural assimilation”, “cultural resistance”, “Hyphenated Americanism,” “biculturalism” and “Latin American identity.”

During the first part of the course, we will focus on acquiring the theoretical arsenal needed to better understand the phenomenon of Latina/o immigration to the United States in its different historical, social, and cultural trends. During the second half, each student will choose a topic they wish to research and will work on preparing a 7–10-page final essay. The research topic must be related to the issues studied in class and must receive the approval of the instructor. Research can be conducted using both qualitative and quantitative data. More traditional book work or artifact analysis, such as the study of a memoir, a novel or a selection of songs or poems is also possible.

**Dr. Osvaldo Cleger** is a new media theorist specializing in digital culture, e-literature, media, and emerging technologies in the Hispanic world, with a primary focus on countries such as Spain, Argentina, Colombia, Mexico, Ecuador, and Cuba. He earned his MA from NMSU and his Ph.D. in Hispanic Literature and Cultural Studies from University of Arizona. His research interests include visual culture, film, photography, hypertext theory and fiction, blogging, digital poetry, procedural rhetoric, simulation theory and video games.



**Lecture:** M/W, 3:30 PM  
Clough 423

**CRN:** 32376

## **Award of HP Distinction in a Pathway**

### **HP Pathways**

HP students may choose to concentrate their HP studies in one or more of three HP Pathways: Research, Service, or Global Engagement. These three Pathways:

- (1) Transcend traditional disciplinary boundaries,
- (2) Cannot be pursued in an existing major, minor, or certificate program,
- (3) Capture fields of passionate interest by many HP students, and
- (4) Advance the Georgia Tech motto, "Progress and Service," and the Goals and Objectives of Georgia Tech's Strategic Plan.

### **Award of HP Distinction in a Pathway**

HP students who complete the Requirements for Award of HP Distinction in a Pathway will receive recognition of the award at graduation, on their HP Certificate and on their HP Stole, and may note this recognition on their resumé as follows:

- (1) Honors Program Award of Distinction in [Global Engagement](#)
- (2) Honors Program Award of Distinction in [Research](#)
- (3) Honors Program Award of Distinction in [Service](#)

***For complete information on the HP Distinction in a Pathway options, visit <https://honorsprogram.gatech.edu/academics/hp-pathways>.***

## Contact Information

**Ms. Amara Anderson, HP Coordinator**

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**404.894.5709**

**Eighth Street West 009**

- HP events
- HP finances (e.g., reimbursements)

**Dr. Amy D'Unger, HP Interim Director & Associate Director**

[amy.dunger@gatech.edu](mailto:amy.dunger@gatech.edu)

**404.385.7533**

**Eighth Street West 007**

- Curriculum and classes
- Transfer credit or study abroad approval
- Academic advising
- Degree audits
- Website or Canvas

**Ms. Amie Raines, HP Program & Operations Manager**

[Araines30@gatech.edu](mailto:Araines30@gatech.edu)

**404.894.8467**

**Eighth Street West 008**

- HP programming
- Honors Leadership Council (HLC)
- Mentoring programs
- Alumni outreach
- HP Student Assistants (HP Help Desk, Guides for the HP Annual Retreat for Entering Students, or HP Communications Assistant)