HP Class Guide
Spring 2026

October 27, 2025

Georgia Tech
John H. Martinson
Honors Program

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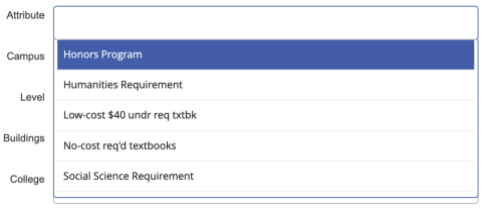
Faculty Director's Note

Dear JMHP Students,

Greetings, I hope your fall semester is going well. Hard to believe, but it's time to register for spring 2026. Phase I registration for fall runs from November 10 – December 12, 2025, and Phase II runs from January 5 - 16, 2026. The first day of the spring semester is Monday, January 12, 2026.

Please check out the JMHP class options listed in this guide and on the **JMHP website**. You'll find great JMHP 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 John H. Martinson Honors Program classes being offered. Select spring 2026, then "Advanced Search," then select "Honors Program" from the "Attribute" menu. This will bring up the JMHP classes that are being offered (make sure to select at least one subject first, or select all subjects to bring up every JMHP class).



Here are some IMPORTANT NOTES about some spring JMHP lab science classes:

1. We are offering HP sections of BIOS 1108, CHEM 1212K, PHYS 2211, and PHYS 2212 with affiliated JMHP labs. ***You must register for both the JMHP lecture and JMHP lab.***

    a. The lecture and labs for CHEM and PHYS are linked in OSCAR—you will ONLY be able to sign up for the JMHP lecture and linked JMHP lab.

    b. The lecture and lab for BIOS are not linked in OSCAR—you must select the correct JMHP lecture and lab class***. If you do not take both the JMHP 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 JMHP-authorized credit for these non-JMHP courses:

- **music ensembles**,
- **research courses**, and
- **study abroad courses**.

As always, please work with your GT Academic Advisor to choose options that bring you the benefits of JMHP-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**. 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

Ms. Sasha McBurse
2 credit hours
50 HP seats

The course content focuses on the interactions of genetics, behavior, and health/wellness outcomes. The primary objectives of this course are to provide students with the knowledge, skills and ability to critically analyze their current status of well-being, set attainable goals for improvement, and develop and implement a program using sound scientific principles for improved conditioning that will result in personal health risk reduction. Students will have one day in the classroom for course content/discussion and one day at the CRC for activity sessions.

Sasha McBurse is a Lecturer in the School of Biological Sciences and teaches APPH 1040 and APPH 1050 in the Institute's wellness requirement. Ms. McBurse joined the Institute in the summer of 2023. Previously, she taught for five years at the University of West Georgia in the Health and Community Wellness degree program. While at UWG, she was selected as a 2022-2023 Governor's Teaching Fellow. Additionally, Ms. McBurse spent three years supporting the Health and Fitness Management degree program at Clayton State University. Prior to her career in higher education, she held positions in cardiac rehabilitation, corporate wellness, and community wellness.

Ms. McBurse holds degrees in exercise science and wellness. She is a certified exercise physiologist, licensed by the American College of Sports Medicine. She also holds a certification in Mental Health First Aid and instructs community CPR classes in her spare time. She enjoys educating others on the importance of managing their health and well-being. Ms. McBurse values the benefits of developing healthy lifestyles and encourages her students to explore these in their own personal wellness journey. She includes real-world applications in her courses, which not only increases student knowledge and interest but also allows students to foster well-being and reach their full potential. Ms. McBurse believes that if you teach and show students how to be well, they will succeed personally, academically, and professionally.

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): 27231
CRN (Fitness- HPF): 27233
CRN (Weightlifting- HPW): 27232

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

Dr. Onur Birol & 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 9:30 AM
Tech Square Phase III

Lab: M, 12:30 PM
Clough 483

CRN (lecture- HP): 33392
CRN (lab- HP): 31704

CHEM 1212K HP: Chemical Principles II
CHEM 1212K HP4: Chemical Principles II LAB

Dr. Carrie Shepler (lecture) and Dr. Deborah Santos (lab)
4 credit hours
12 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 Ph.D. in Chemistry Education from Georgia State University this year and an M.S. in Organic Chemistry from the University of Georgia in 2015. She was a high school chemistry teacher prior to earning her Ph.D. and has current research interests in how students learn to "do" science. Her Ph.D. 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:	T/TH, 8:00 AM Clough 144
Lab:	TH, 12:30 PM Clough 572
CRN (lecture- HP):	30608
CRN (lab- HP4):	28844

CHEM 3700 HP: Alternative Energy

Dr. Thomas Orlando & Dr. Micah Ziegler
3 credit hours
8 HP seats
Prerequisites: CHEM 1211K **or** CHEM 1310 **and** CHEM 1212K **and** PHYS 2211 **and** PHYS 2212

This course will provide a general overview of popular alternative energy resources, technologies, and strategies that are currently being used or developed to help reduce global dependence on fossil fuels. The basic scientific principles governing the current and future approaches in solar photovoltaics, fuel cells, batteries, wind power, geothermal, biomass conversion, nuclear energy, smart-grids, etc. will be presented. Though the course will focus on the basic principles and fundamental science underpinning the current advancements in energy technologies, we will also emphasize understanding the economic, policy, and general sustainability issues associated with alternative energy options. Due to the multidisciplinary nature of the topic, the course will include guest instructors from across the campus.

Dr. Thomas Orlando is a Regent's Professor in the School of Chemistry and Biochemistry at Georgia Tech. He received his Ph.D. 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 fur 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.

Dr. Micah S. Ziegler is an Assistant Professor in the School of Chemical and Biomolecular Engineering and the Jimmy and Rosalynn Carter School of Public Policy at the Georgia Institute of Technology. He evaluates sustainable energy and chemical technologies, their impact, and their potential. His research helps to shape robust strategies to accelerate the improvement and deployment of technologies that can enable a global transition to sustainable and equitable energy systems. Dr. Ziegler conducted postdoctoral research in energy systems and technological change at the Massachusetts Institute of Technology. He earned a Ph.D. in Chemistry from the University of California, Berkeley and a B.S. in Chemistry from Yale University.

Lecture: T/TH, 9:30 AM
Howey S204

CRN: 30577

COE 2001 HP: Statics

Dr. Jason Wang
2 credit hours
20 HP seats
Prerequisites: MATH 1552 **and** PHYS 2211

This course is an introduction to engineering, specifically engineering mechanics. It utilizes concepts from physics and applies them in an engineering framework, setting the foundation for future engineering analysis and design courses. The instructor will model various problem-solving approaches to help students learn to work independently and collaboratively as they analyze diverse problems common in engineering mechanics.

Through in-class discussions and problem-solving, students will learn to see the world around them from an engineering mechanics perspective.

Dr. Jason Wang is the Senior Director of Institutional Research and Planning and Director of Data Management. He earned his Ph.D. in Bioengineering and his B.S. and M.S. in Mechanical Engineering from Georgia Tech. Jason's passion for teaching and learning has taken him from being an undergraduate student to a graduate TA to an instructor to working in the Center for Teaching and Learning. His position in IRP provides new opportunities to work on undergraduate education at a higher level while continuing to engage with Georgia Tech students in the classroom.

Lecture: T/TH, 3:30 PM
Curran Street Deck 210 (LLC West Commons Classroom, across the street from Eighth Street South apartments—enter under the blue awning)

CRN: 34979

COE 3001 HP: Mechanics of Deformable Bodies

Dr. Mayuresh Patil
3 credit hours
25 HP seats
Prerequisite: COE 2001

This is the first course in the broad area of solid mechanics and structural analysis. We will focus on answering the following question:

- What are engineering structures?
- Why do structures fail?
- What is stress?
- How to calculate stresses in simple structures?
- How can we transform stress and why is it important?
- What is strain?
- What is material stiffness?
- How can we calculate deformation of simple structures?
- How does change in temperature affect strains, stresses and deformation?
- What is buckling and why is it important?
- How do you calculate the buckling load for simple structures?

Dr. Mayuresh Patil is a Professor of the Practice in the Daniel Guggenheim School of Aerospace Engineering. He earned his Ph.D. at Georgia Tech many years ago and was a Professor of Aerospace and Ocean Engineering at Virginia Tech for a major part of his career. He came back to Georgia Tech five year ago. Prof. Patil teaches in the general area of structural mechanics and dynamics. His research is focused on the development and application of computational methods (including immersed interface methods) and optimization algorithms (including shape sensitivity analysis methods) to multiscale, multiphysics problems in solid mechanics, fluid mechanics, and multifunctional materials.

Lecture: T/TH, 2:00 PM
College of Computing 53

CRN: 35372

COS 2801 HP1: Special Topics: Science of Occupational Health and Safety

1 credit hour
10 HP seats

Lecture: W, 3:30 PM
Skiles 271

CRN: 35484

COS 2801 HP2: Special Topics: How the Brain Learns to Move- The Science of Skill

1 credit hour
10 HP seats
Please note: this class meets for the second ½ of the term and begins on March 2, 2026.

Lecture: M/W, 5:00 PM
Skiles 154

CRN: 35485

COS 2803 HP: Special Topics: Progress and Service Forum (STEM and Society-Leading Through Science)

Dr. Christopher Stanzione
3 credit hours
5 HP seats
Please note: Counts toward Award of HP Distinction in the Service Pathway.

This course is designed to help students explore and reflect on their emerging professional identity in STEM while fostering essential leadership and teamwork skills. Throughout the semester, students will be encouraged to think critically about the societal impacts of STEM work and to examine their own professional goals and leadership potential. By engaging with interdisciplinary approaches and real-world challenges, students will learn to analyze complex societal problems using STEM frameworks and collaborate across disciplines to develop actionable solutions. A key focus of the course will also be on strengthening communication skills, particularly the ability to translate STEM knowledge for non-specialist audiences, ensuring that students are equipped to contribute meaningfully both within and beyond their technical fields.

This course satisfies a requirement for Georgia Tech's Leaders in Progress & Service Program: https://distinguishyourself.gatech.edu.

Dr. Christopher Stanzione is a Principal Academic Professional, serves as the Faculty Director of the Explore LLC, and has a faculty appointment in the School of Psychology. Dr. Stanzione is a trained Educational Psychologist with over 10 years of experience in higher education. He is a well-respected teacher having received several teaching awards during his tenure (Undergraduate Educator Award, 2018; Eric R. Immel Award, 2018; Geoffrey G. Eichholz Teaching Excellence Award, 2024). Further, Dr. Stanzione has led efforts to reduce the financial burden of textbooks by implementing a grant funded pilot program using Open Educational Resources in General Psychology. As an administrator, Dr. Stanzione has led a team of likeminded faculty to identify new degree opportunities for students. For example, he received the GT-AMP grant to begin a new internal internship program, implemented two new minor programs in Mental Health & Well-Being and Computation & Cognition, and created a 5-year BSMS program.

Lecture: T/TH, 9:30 AM
College of Computing 102

CRN: 35405

CS 1301 HP: Introduction to Computing
CS 1301R HPR: Introduction to Computing Recitation

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.

Lecture:	online, asynchronous
Recitation:	TH, 5:00 PM online, synchronous
CRN (online lecture- HP):	25510
CRN (online recitation- HPR):	27057

EAS 2600 HP: Earth Processes
EAS 1601 HPL: Earth Processes LAB

Dr. Samantha Wilson (lecture) and Dr. Liana Boop (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.

Geology Rocks! This course and its accompanying lab provide an exciting exploration of the Earth and its many dynamic systems. Students will investigate the planet's structure—including its layers, minerals, volcanoes, and surface water—and examine how these components interact to shape the world around us.

Dr. Samantha R. Wilson is a Senior Academic Professional in the School of Earth and Atmospheric Sciences (EAS). With a background in geology and a passion for teaching, Dr. Wilson earned her bachelor's degree in Geology and Adolescent Education from SUNY Geneseo and her Ph.D. in Earth and Environmental Science from the University of Michigan, where she specialized in paleomagnetism.

Dr. Liana Boop is passionate about sustainability and seeks to empower people to live more harmoniously with the environment. She is a trained geologist, holding a Ph.D. in Geology and a Professional Geologist licensure. Before joining Georgia Tech in 2024, she taught at a community college in Houston, Texas for nine years. Before joining academia, she worked in environmental and geological consulting, completing environmental and geophysical assessments. Her hobbies include exercising, hiking, kayaking, caving, knitting, attending live theatre performances, and cooking delicious plant-based foods.

Lecture:	T/TH, 9:30 AM Clough 152
Lab:	TH, 12:30 PM Kendeda 288
CRN (lecture- HP):	35406
CRN (lab- HPL):	22560

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, 3:30 PM
Whitaker 1103

CRN: 30336

ECON 4440 HP: Economics of Natural Resources

Dr. Dylan Brewer
3 credit hours
10 HP seats
Please note: Counts toward social sciences general education requirements.
Prerequisite: ECON 2100 **or** ECON 2101 **or** ECON 2016

Is economic growth compatible with environmental quality? This course discusses how human social and economic behavior impacts and is impacted by the environment. We discuss how to design policies that promote economically and environmentally sustainable communities such as pollution pricing and property-rights approaches. In addition, we discuss how communities can manage environmental commons problems by relying on local knowledge, norms, and institutions. At the end of the course, students analyze data related to an environmental policy change, applying basic econometric techniques for program evaluation.

The top-level learning objective for this course is for students to have a critical understanding of the tradeoffs between consumption of dirty goods and environmental amenities. Inherent in this is an understanding of the consequences of command-and-control environmental policies, market-based environmental policies, local governance approaches, and non-intervention. By the end of the semester, students will be comfortable using mathematical models of firm and individual behavior as a framework for analyzing a broad range of environmental problems. In addition, students will be able to apply canonical conceptual models from economics to environmental problems in new contexts. Finally, students will be able to use econometric techniques to analyze the effects of environmental policies on economic outcomes.

Dr. Dylan Brewer is an Assistant Professor in the School of Economics. His research uses applied microeconomics to study topics such as residential energy consumption and efficiency, recycling, air quality, and applied econometrics. Before coming to Georgia Tech, Professor Brewer earned a dual Ph.D. in Economics and Environmental Science and Policy from Michigan State University.

Lecture: T/TH, 12:30 PM
Van Leer C457

CRN: 35343

ENGL 1102 HP1: English Composition II

Dr. Arpit Kumar
3 credit hours
18 HP seats

Many have dubbed the twenty-first century “the Asian century” predicting the economic, cultural, and political dominance of the world’s most populous continent. Yet the first quarter of the century has seen democratic backsliding and the growth of populisms driven by cults of personality, perhaps mirroring a global trend. The Asian Century is also threatened by climate change, poverty, and bursts of communal and religious violence but these crises have not deterred the increasingly visible figure of the “Argumentative Asian”. Through films, books, and digital media, a rhetoric of Asian promise— even dominance— is beginning to spread its wings. Our course will use conversations and arguments surrounding “the Asian century” and explore rhetorics forwarded by Asian artists, intellectuals, and technocrats to develop expertise in multimodal communication. The thematic playground of “the argumentative Asian” will furnish us with texts, films, and media— such as Aravind Adiga’s The White Tiger and Bong Joon Ho’s Parasite— to facilitate the rehearsal of skills in WOVEN communication. Assignments will include varied forms of composition including digital essay, multimedia presentation, collaborative visual media project, and a short research-essay.

Dr. Arpit Kumar is a Marion L. Brittain Postdoctoral Fellow in the Writing and Communication Program at Georgia Tech. After teaching at the University of Delhi for several years, Kumar arrived in the U.S. and completed his Ph.D. in English at the University of Notre Dame in 2023. His research focuses on British and Global literatures of the eighteenth century with an emphasis on sociability and theories of publics and counterpublics. In simple terms, he researches how people use language to form publics or communities that can influence and resist the state and other authorities. To do this, he investigates questions that emerge from cultural conflicts that occur at the intersection of literature, media, technology, and politics. He is currently at work on his monograph—*Cultivating Difference: Sociability and Empire in the Eighteenth Century*— which considers how ‘sociable’ ideas such as manners, politeness, and sensibility travel across national and civilizational boundaries. Kumar’s pedagogical approach emphasizes deepening thought with empathy. His previously taught classes include: Sociable Women in the Public Sphere, Intellect and Liberation: Reading for the Future from Bacon to Black Mirror, How to Become a Celebrity, Talking Machines and Other Intelligences, and Fighting in the Square: Polarization and Digital Rhetorics.

Lecture: M/W, 11:00 AM
Skiles 343

CRN: 31595

ENGL 1102 HP2: English Composition II

Dr. Anila Shree
3 credit hours
18 HP seats

Women and environmental resources intersect surprisingly often in our everyday language and social discourse. Women's biological bodies and the bodies of nature (rivers, land, forests) are viewed in various contexts as "resources" meant for extraction and as "objects" to be used: they are therefore both sites of violence and conflict. What are the rights of a body? How does one define or become a body? How do bodies become linked to identities? These questions will guide our examination of a hidden but forceful dimension of modern language and culture: the overlapping discursive silencing of various bodies— environmental, gendered, and non-human. Environmental resources are often gendered, especially feminized, as nourishing, bountiful, and fertile before their exploitation, use, and degradation. Women's bodies are celebrated, policed, idolized in ways that are comparable to our deification, taming, and regulation of the natural world.

The course will also consider the benefits and pitfalls of extending the concept of embodiment to non-human entities—plants, objects, and animals. We will explore the theme through texts such as Han Kang's *The Vegetarian* (2007), Steven Spielberg's *Jurassic Park* (1993), and Amitav Ghosh's *The Nutmeg's Curse* (2021). As we explore these themes and texts, we will collaborate to practice and develop mastery with tools of multimodal communication focusing especially on the dynamic use of written, oral, visual, and electronic, non-verbal modes. Assignments may include an in-class presentation, a research paper, and a personal narrative. This is a discussion-based class that will rely on student-led conversations, daily written exercises, and active in-class participation.

Dr. Anila Shree received her Ph.D. from the University of Notre Dame where she specialized in British and French women's writing with a particular focus on literary historiography and narrative innovation in prose fiction. Her research investigates how women writers respond to historic disruptions by developing new vocabularies of reason and feeling in stories of love. Further research interests include the rhetoric of objects and, more broadly, of the non-human. In the classroom, she is focused on creating student-led and inclusive learning environments that foster critical thinking and empathy. Shree is a Marion L. Brittain Postdoctoral Fellow at Georgia Tech where she teaches Writing and Rhetoric courses and serves as an Assistant Director and a Professional Consultant at the Naugle Writing and Communication Center.

Lecture: T/TH, 9:30 AM
D.M. Smith 019

CRN: 31665

ENGL 1102 HP3: English Composition II

Dr. Kelly Williams
3 credit hours
18 HP seats

This course provides opportunities for you to become a more effective communicator as you refine your thinking, writing, speaking, designing, collaborating, and reflecting. As part of the WOVEN (written, oral, visual, electronic, and nonverbal communication) curriculum, ENGL 1102 emphasizes developing your strategic processes in multimodal communication, critical analysis, and research. In this section of the course, you'll investigate the STEM Renaissance, a period of groundbreaking innovation in the 15th-17th centuries, as you employ writing and other WOVEN modes to create projects about early inventions in a range of genres. Students in this section can expect to undertake archival research in GT's rare books and manuscript library and conduct qualitative research on emerging technologies such as virtual reality (VR). Projects include a presentation, podcast, and digital museum exhibition.

Dr. Kelly Williams is a Marion L. Brittain postdoctoral fellow in the Writing and Communication Program. She has 7 years of experience teaching writing-intensive courses and her pedagogy draws on digital media, such as virtual reality (VR), to engage STEM learners in multimodal communication. Williams's research focuses on pre-modern race studies, environmental science, and histories of science and technology more generally. She has published scholarship in the journal *Shakespeare* and the edited volume, *Inclusive Shakespeares: Identity, Pedagogy, Performance.* Inspired by her material science and engineering students at Georgia Tech, Williams is currently working on research related to Christopher Marlowe's *Tamburlaine* plays and the history of asphalt industrialization. She received her Ph.D. in English from Emory University in May 2023.

Lecture: M/W, 9:30 AM
Skiles 346

CRN: 28497

GT 2030 HP1: Progress and Service Forum

Dr. Kate Williams
3 credit hours
10 HP seats
Please note: Counts toward Award of HP Distinction in the Service Pathway.

Georgia Tech's motto, "Progress and Service", captures the institution's mission to prepare leaders (you!) 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 faculty, peers, and community leaders, you will analyze these big issues from multiple perspectives, equipping you with greater insight into the roles and actions that enable leaders to make change.

Progress and Service Forum is a new course that serves as a Foundational Course for the new Leaders in Progress and Service program that is being launched as part of Georgia Tech's 2025 Quality Enhancement Plan. Pending faculty governance approval, the Leaders in Progress and Service program will include a proposed graduation distinction to be earned upon successful completion of a sequence including the foundational course, immersive learning, and participation in the Progress and Service Summit. Dr. Williams will provide additional information on the opportunity during the first week of class.

Dr. Kate Williams is the Associate Director of the Center for Teaching and Learning, which helps Georgia Tech instructors create effective courses. Dr. Williams 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, Dr. Williams has 25 years of experience in higher education in both faculty and leadership roles. In the Center for Teaching and Learning at Georgia Tech, she has led a number of initiatives, including designing and facilitating the Tech to Teaching certificate program for graduate students. In 2023, she launched a faculty development program to support the Transformative Teaching and Learning (TTL) strategic plan initiative that has helped faculty redesign three dozen courses and reached more than 3,000 students. With an overall CIOS score of 4.9, Dr. Williams' students describe her as "an excellent classroom facilitator who keeps you really engaged."

Lecture: F, 11:00 AM
Clough 129

CRN: 35409

GT 2030 HP2: Progress and Service Forum

Dr. Jason Wang
3 credit hours
10 HP seats
Please note: Counts toward Award of HP Distinction in the Service Pathway.

Georgia Tech's motto, "Progress and Service", captures the institution's mission to prepare leaders (you!) 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 faculty, peers, and community leaders, you will analyze these big issues from multiple perspectives, equipping you with greater insight into the roles and actions that enable leaders to make change.

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Dr. Jason Wang is the Senior Director of Institutional Research and Planning and Director of Data Management. He earned his Ph.D. in Bioengineering and his B.S. and M.S. in Mechanical Engineering from Georgia Tech. Jason's passion for teaching and learning has taken him from being an undergraduate student to a graduate TA to an instructor to working in the Center for Teaching and Learning. His position in IRP provides new opportunities to work on undergraduate education at a higher level while continuing to engage with Georgia Tech students in the classroom.

Lecture: F, 11:00 AM
Swann 325

CRN: 35410

HTS 2006 HP: History of the Old South

Dr. Christopher Lawton
3 credit hours
20 HP seats
Please note: Counts toward social sciences general education requirements.

Far from the myths about the slow constancy of the antebellum South, this is a course about a region in the throes of momentous transformation. Somewhere between the Revolution and the Confederacy, a geographic determination became a cultural and political construct and the southeastern states became “the South.” Yet “the South” never was as stable, uniform, or old as the mythmakers would have it, then or now.

This semester we will explore histories of Southern space, place, and identity by focusing mainly on issues of race, class, and gender in the decades before the Civil War. We will work together to try to identify and understand some of the extremes that defined varieties of existence across the antebellum South. We will then consider whether it was because of those extremes, or despite them, that Southerners were able to find coherence enough to forge forward through secession and attempt to create their own nation.

Dr. Christopher Lawton is a historian whose work is focused on the cultural and social history of the American south. His public-facing projects over the last decade have been funded by multiple grants from the National Endowment for the Humanities (2017, 2018, 2023), as well as Georgia Humanities (2012), the Spencer Foundation (2021), the Spencer and William T. Grant Foundations (2022), and Monument Lab (2024). He is co-author, with Laura Nelson and Randy Reid, of *Seen/Unseen: Hidden Lives in a Community of Enslaved Georgians* (UGA Press, 2021), which won the Georgia Historical Records Advisory Council’s Award for Excellence in Documenting Georgia's History and was shortlisted for the American Library Association's Best Historical Materials. He has published articles on 19th-century southern history, history and K-12 education, and the historical landscapes of Georgia. He is co-founder and director of a non-profit dedicated to connecting digital humanities with place-based education across the state. These community-based projects (often in partnership with UGA's Willson Center for Humanities and Arts) have been profiled by the National Humanities Alliance and in *BuzzFeed News*, *Georgia Magazine*, *Flagpole,* the *Athens Banner-Herald*, and *UGA College of Education News.* He has spoken about his work across the United States, as well as in Australia, Canada, Germany, and the U.K.

Lecture: T/TH, 9:30 AM
Skiles 308

CRN: 35249

HTS 3071 HP: Sociology of Crime

Dr. Amy D'Unger
3 credit hours
25 HP seats
Please note: Counts toward social sciences general education requirements.

This course focuses on the important theories and substantive issues in the study of crime, with an emphasis on *sociological perspectives*. We will be examining such subjects as: how crime and criminals are perceived; methodological and theoretical approaches for studying crime; characteristics of offenders; and societal reactions to crime. The course provides a broad historical understanding of crime, with a focus on modern America.

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 Faculty Director of the John H. Martinson Honors Program. She is also the President of the Georgia Collegiate Honors Council and Treasurer of the Southern Regional Honors Council.

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: 35036

IAC 2002 HP: Science, Engineering, and Religion

Dr. John Cressler
3 credit hours
12 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 323

CRN: 29504

INTA 1110 HP: Introduction to International Relations

Dr. Jason Rich
3 credit hours
10 HP seats
Please note: Counts toward Award of HP Distinction in the Global Engagement Pathway and social sciences general education requirements.

This course will help students to understand the background and historical development of the current international system. Together, we will come to understand the various theoretical paradigms and explore how each is used to analyze international relations and inform policy. In addition, the class will learn about the various structures of global governance including international institutions, international law, and human rights. In order to do all this, the course will take advantage of readings, lectures, discussions, as well as various pieces of pop culture that reaffirm the importance of these concepts. By the end of the semester, students will be proficient in the basic language of the field, be able to view international relations utilizing multiple theoretical lenses, apply these theories when analyzing current world events, and will be capable of explaining their analysis to others.

Dr. Jason Rich is a Lecturer with the Nunn School of International Affairs at Georgia Tech. He received a Ph.D. in International Relations and Comparative Government from the University of Connecticut. Prior to coming to Georgia Tech, he has held tenured and untenured positions at Georgia College and State University, the University of Hartford, as well as the University of Connecticut. He has authored numerous articles, chapters, and papers on a range of subjects, including U.S. foreign policy, international security as well as U.S. electoral politics. Much of his work has focused on how contextual elements shape perceptions and influence outcomes in each of these issue areas. Today, his primary focus is on teaching in the areas of American Government, International Relations, International Law, and International Security. He also continues to coordinate the award-winning Nunn School's "Reimagining U.S. Global Leadership" speaker series with the GT Alumni Association.

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

CRN: 35389

LMC 3112 HP: Evolution and the Industrial Age

Dr. Carol Senf
3 credit hours
15 HP seats
Please note: Counts toward humanities and ethics general education requirements.

Evolution and the Industrial Age focuses on the literature and culture of the Long Nineteenth Century, with particular emphasis on the impact that both industrialism and Darwinian science had on the lives of real human beings who lived through and responded to the dramatic changes taking place at the time. While the bulk of class readings will focus on England (the country that was the first to be impacted by industrialism, colonialism, and Darwinian science), the class will move to Atlanta, where the Georgia Tech Archives will reveal the extent to which the creation of a new school of technology was influenced by industrialism.

Dr. Carol Senf has been at Georgia Tech (first the English Department, then the School of Literature, Media, and Communication, and now the School of Literature, Media, and Communication) since 1982. In addition to teaching classes in literature (women writers and the literature of the Long Nineteenth Century), she also served as Associate Chair and Director of Undergraduate Studies. While perfectly capable of writing about serious literature (George Eliot, all three Brontes, and Thomas Hardy), she particularly likes "ghoulies and ghosties and long-leggedy beasties and things that go bump in the night" whether they appear in literature or film.

Lecture: T/TH, 3:30 PM
Skiles 371

CRN: 35402

LMC 3257 HP: Global Cinema- Action Films

Dr. Koel Banerjee
3 credit hours
15 HP seats
Please note: Counts toward Award of HP Distinction in the Global Engagement Pathway and humanities general education requirements.

Global Cinema: Action Films introduces students to the major action subgenres—from spy thrillers and buddy films to sci-fi blockbusters and superhero spectaculars—while examining its aesthetic devices, history, cultural impact, and global evolution. The course traces the emergence of action cinema through its precursors, such as film noir and westerns, to establish the genre's codes, conventions, and preoccupations. It further situates action film as a global practice by analyzing Hollywood productions alongside Hong Kong wuxia, Bollywood masala films, Japanese samurai cinema, and Korean thrillers, revealing their influence on the idiom, tempo, and aesthetic strategies of the contemporary action film. The course also explores how the genre responds to geopolitical crises and world historical events. Through screenings, discussion, and critical analysis, students will develop a deeper appreciation for action cinema's aesthetic innovations and cultural significance, whether they are new to the genre or already familiar with it.

Dr. Koel Banerjee (Ph.D., University of Minnesota) is a Visiting Assistant Professor in the School of Literature, Media, and Communication. A scholar of global film and media, literary and cultural studies, and postcolonial theory, her research explores how films and other cultural texts shape and are shaped by their contexts of production and reception. Her teaching is animated by the question: Why are we moved by the moving image? She has published in journals such as *Camera Obscura*, *Screen*, *Film Quarterly*, and *Cultural Critique*, as well as in edited anthologies including *The Oxford Handbook of Children's Film*.

Lecture: T/TH, 2:00 PM
Skiles 269

CRN: 3540

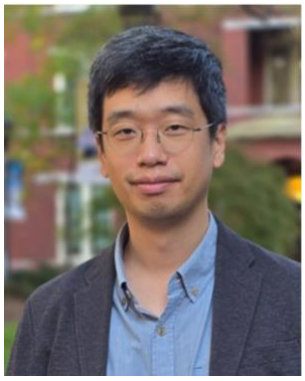
MATH 1552 HP: Integral Calculus
MATH 1552 HP1: Integral Calculus STUDIO

Dr. Soon Ho Kim
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

This course will cover the fundamental concepts of integrals and infinite series. The course has the following learning objectives:

- Students will understand the geometric concept of a definite integral and learn how to approximate the integral using Riemann sums.
- Students will be able to evaluate indefinite and definite integrals algebraically using various integration techniques, including substitution, integration by parts, trigonometric substitution, trigonometric identities, and partial fractions.
- The idea of convergence will be applied to improper integrals and infinite series.
- Given an infinite series, students can analyze the function to determine if the series converges by applying an appropriate convergence test (divergence, comparison, integral, ratio or root).
- Taylor series will be constructed for various functions and will be applied to numerical approximation problems and definite integrals.
- Students will understand the proper usage of mathematical notation in relation to the above topics.

Dr. Soon Ho Kim is a Visiting Assistant Professor in the School of Mathematics. His research is in computational neuroscience, focusing on how biological and artificial neural networks perform computations.



Lecture: M/W/F, 11:00 AM
Howey L3

Studio: T/TH, 11:00 AM
Skiles 257

CRN (lecture- HP): 31437
CRN (studio- HP1): 31438

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, 8:00 AM
Howey L3

Studio: F, 8:00 AM
Skiles 246

CRN (lecture- HP): 30558
CRN (studio- HP1): 30559

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

Dr. Salvadore Barone
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

Math 2551 is an introduction to multivariable calculus which includes vector calculus, gradients, linear approximation, tangent planes, differentials, optimization, Lagrange multipliers, double and triple integrals, and applications. Upon successful completion of the course, students will be able to: describe vectors, surfaces, and multivariable functions geometrically; use derivatives and gradients to analyze and estimate how such functions change; solve optimization problems; evaluate scalar and vector integrals over curves and surfaces using Green's, Gauss's, and Stokes's theorems; and interpret multivariable quantities in geometric or real-world contexts.

Dr. Sal Barone is a Senior Academic Professional in the School of Mathematics and has been teaching undergraduate courses at Georgia Tech since 2013. Dr. Barone has a clear passion for teaching and has won several teaching awards at GT, and he has taught nearly all the lower-level math classes offered at GT. Dr. Barone also served as the course coordinator for Math 1554 Linear Algebra for six years.

Lecture:	T/TH, 2:00 PM College of Computing 16
Studio:	M/W, 2:00 PM Skiles 170
CRN (lecture- HP):	30560
CRN (studio- HP1):	30564

MGT 4803 HP: Special Topics: Leadership Development

Dr. Ilya Gokhman
3 credit hours
10 HP seats
Please note: Counts toward Award of HP Distinction in the Service Pathway.

The ability to lead effectively is critical to both professional and personal success. At its core, leadership involves the ability to influence others to obtain positive results. It requires strong skills in communication, decision-making, and stakeholder engagement to mobilize people toward a common goal. The purpose of the Leadership Development (LD) course is to enable students to become effective and ethical leaders of teams and organizations, to meaningfully exercise both formal and informal leadership, and to embark on paths of lifelong personal leadership growth. The class invites and requires personal, intellectual, and global curiosity.

The foundational premise of this course is that leaders who know themselves well and consciously develop their leadership abilities throughout their lifetimes will be more effective, more successful, and lead more fulfilling lives. To do so, leaders must take responsibility for their own development, rather than relying solely on their organizations. The course is grounded in the concept of Authentic Leadership, developed by Bill George, a Georgia Tech graduate, former CEO of Medtronic, and current Clinical Professor at Harvard Business School.

Dr. Ilya Gokhman is a Lecturer in the Institute for Leadership and Social Impact, where he teaches a variety of courses related to leadership, teamwork, and collaboration. Prior to this role, he served as the Co-Director of Georgia Tech's Grand Challenges program, launched the Grand Challenges Global Experience (GCGX) study abroad program in South Africa, and taught courses on innovation, sustainability, and organization in the Jimmy and Rosalynn Carter School of Public Policy. His research and teaching live at the intersection of collaboration, innovation, and social impact. Dr. Gokhman earned a Ph.D. in Media, Technology, and Society with a focus in Leadership and Teamwork from Northwestern University, an M.S. in Organizational Psychology from Georgia Tech, an MBA from University of Iowa, and degrees in Economics and Accounting from University of Georgia. Before academia, he worked in consulting, non-profits, and education in Atlanta, Chicago, Italy, and South Africa.

Lecture: T/TH, 9:30 AM
Scheller 221

CRN: 35437

ML 2500 HP: Introduction to Cross-Cultural Studies

Dr. Juan Carlos Rodriguez
3 credit hours
10 HP seats
Please note: Counts toward Award of HP Distinction in the Global Engagement Pathway and humanities general education requirements.

In this course we will study the representation of Soccer National Teams (Uruguay, Brazil, Argentina, and Spain), as well as World Cup's Global Heroes (Pele, Maradona, Higuita, Messi, Neymar, Vini Jr., Di Maria, and others) in documentary films and streaming series. We will examine how the quest of the heroes of these films relates to national and global dilemmas, such as class, race, gender dynamics, politics, social challenges, economic development, mental health, migration, etc.

Dr. Juan Carlos Rodriguez (Ph.D., Program in Literature, Duke University, 2007) is Associate Professor of Spanish at Georgia Tech, co-director of the Atlanta Global Studies Center, and co-editor of the collections of essays *New Documentaries in Latin America* (Palgrave, 2014) and *Digital Humanities in Latin America* (University Press of Florida, 2020). He is also co-editing a book series, *Reframing Media, Technology, and Culture in Latin/o America*, for the University of Florida Press. His research focuses on Latin American documentaries from perspectives informed by sustainability, critical theory, urban and environmental studies, and digital humanities. As an educator and scholar, Rodríguez has a strong record of community engagement. He is the founding director of Georgia Tech's *Global Media Festival: Sustainability Across Languages and Cultures*. His public digital humanities project *Vieques Struggle: A Digital Video Archive*, is a collection of video interviews that tells the story of demilitarization in the island of Vieques in Puerto Rico. Using materials from the Vieques Struggle project, he just completed his first long feature documentary, *Vieques: A Living Archive*, which covers the history of Vieques before and after the departure of the US Navy from the island in 2003.

Lecture: T/TH, 12:30 PM
Engineering Science and Mechanics 212

CRN: 34952

Music Ensembles (1 credit hour)

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

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

Why take an ensemble class for JMHP credit?

- Music ensembles are active-learning classes—"hands-on" and "voice-on"— a great fit for our curious, creative, and highly motivated JMHP students.

- Making music is a universal and uplifting human experience—a great fit for our times and all times.

PHIL 3115 HP: Philosophy of Science

Dr. Abigail Mills
3 credit hours
10 HP seats
Please note: Counts toward humanities general education requirements.

In this course, we will discuss issues that arise from philosophical reflection on the practice of science. What is science, and what separates it from other supposed sources of truth and knowledge? How has the practice of science changed over time? Should we believe what our best scientific theories tell us---even about things we cannot see? Should we 'follow the science' in making policy? We will examine traditional philosophical approaches to these questions and many more, but we will connect them with current, relevant issues in public life, wherever possible.

We will discuss both historical and modern science, as well as a variety of scientific fields, including biology, psychology, physics, chemistry, and astronomy. The readings will primarily be primary sources

Dr. Abigail Mills is a Postdoctoral Fellow in the School of Public Policy. She earned her Ph.D. in History and Philosophy of Science at the University of Notre Dame in 2024 with a dissertation on the development of cosmic distance and expansion measurement. She has a BS in Astronomy from the University of Illinois, Urbana-Champaign. Her research focuses on the philosophy of modern astronomy and cosmology, as well as science policy.

Lecture: T/TH, 3:30 PM
Clough 325

CRN: 35400

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 L1

Lab: M, 3:30 PM
Clough 362

CRN (lecture- HP): 30461
CRN (lab- HPL): 30465

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). 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 L4
Lab:	T, 3:30 PM Clough 383
CRN (lecture- HP):	31671
CRN (lab- HPL):	31672

PUBP 3016 HP: Judicial Processes

Judge Chong Kim and Ms. Jennifer Weizenecker
3 credit hours
15 HP seats
Please note: Counts toward social sciences general education requirements.

This course covers the functions, structures and procedures of state and federal court systems. The course addresses civil and criminal procedures in addition to judicial concepts that apply to both civil and criminal cases such as jury selection, statutory interpretation, rules of evidence and appeals. Students will study different types of law that impact judicial decisions: statutes, case law and rules of evidence and procedure.

Judge Chong Kim (Washington and Lee University, J.D. 1992) is a Chief Judge in the Municipal Court of the City of Doraville. She was in private practice, exclusively, in criminal defense law for 27 years including 18 years in her own practice. She was appointed as a municipal court Judge in 2020. Judge Kim is the first Korean American appointed to the J udiciary in Georgia. She was named as a "Super Lawyer" by Atlanta Magazine in 2005. She has been a member of the Georgia Asian Pacific American Bar Association (GAPABA) since its founding in 1993. She was Chair of the GAPABA Law Foundation (charitable arm of GAPABA) for 12 years.

Ms. Jennifer Weizenecker (Vanderbilt University, J.D. 2011) is a partner in the Civil Business/Tort Litigation Division of JonesDay and has been a team member in more than 25 high stakes cases tried to verdict. She has tried cases across the country in state and federal courts. She also has trial experience in representing immigrants seeking asylum. She provides pro bono services to asylum seekers. She is a 2020 Recipient of Justice Rober Benham Award for Community Service Award by the Chief Justice's Commission on Professionalism.

Lecture: W, 5:00 PM
Skiles 308

CRN: 35344

SPAN 4150 HP: Spanish Service Learning

Dr. Kelly Comfort
3 credit hours
10 HP seats
Please note: Course is taught in Spanish. Counts toward Award of HP Distinction in the Global Engagement **or** Service Pathway and humanities general education requirements.
Prerequisites: SPAN 2002 **or** AB/IB equivalent

This class combines classroom discussion with Latino community service projects to allow students to practice Spanish with native speakers and improve their intercultural competence. The course is conducted in Spanish. Students must enroll in this course during Phase 1 in order to be placed in a service-learning position. This class will become permit restricted during Phase 2.

SPAN 4150 requires 3 hours of service-learning per week in Atlanta's Latino community for a total of 45 hours. Service-learning project options will be in the areas of education, business, healthcare, immigration law, and non-profit outreach. There are also options to work with organizations fighting against domestic violence and human trafficking. You will be able to rank your service-project preferences by weekly schedule and by outreach area.
Although the class meets online, the service-learning placements will be in person in or near Atlanta. Students are responsible for the cost inherent in traveling to and from the service-learning site.

Dr. Kelly Comfort received her Ph.D. 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 on which this HP course is based.

Lecture: T/TH, 8:25 AM
online, synchronous

CRN: 34951

Award of JMHP Distinction in a Pathway

JMHP Pathways

JMHP students may choose to concentrate their JMHP studies in one or more of three JMHP 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 JMHP students, and
(4) Advance the Georgia Tech motto, “Progress and Service,” and the Goals and Objectives of Georgia Tech’s Strategic Plan.

Award of JMHP Distinction in a Pathway

JMHP students who complete the Requirements for Award of JMHP Distinction in a Pathway will receive recognition of the award at graduation, on their JMHP 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 JMHP Distinction in a Pathway options, visit https://honorsprogram.gatech.edu/academics/hp-pathways.