College of the Atlantic

Updated: 9/12/2025

Course List FA-25

This list will be updated as courses are added or changed; current offering and course descriptions can be found on the Portal.

Faculty	Course#	Level	Degree Req?	Instructor Permission?	Coursename
Anderson, John	ES 4068	MA		Yes	Tutorial: Human Anatomy and Physiology
Anderson, John	MD 1022	I		Yes	Working the Sea
Anderson, John	MD 2017	IM			Farming the Wild
Baker, Jodi	AD 1060A	I	ADS		Movement Training Basics
Capers, Colin	HE 1010A	I	HE		Human Ecology Core Course
Cline, Ken	HS 1032	I	HS		Acadia: Exploring the National Park Idea
Cline, Ken	HS 3023	M	HS		International Wildlife Policy and Protected Areas
Cox, Gray	HS 2093	IM	HS		Strategies for Social Change
Edwards, Torrie	ES 1093A	I	QR		Introduction to Computer Science: Data
Feldman, David	ES 1056	I	ES QR		Physics and Mathematics of Sustainable Energy
Ferrari , Melissa	AD 1080	I	ADS		Frame by Frame: Hand-Drawn Animation
Friedlander, Jay	HS 3062	M	HS		Solutions
Friedlander, Jay	HS 3111	M			Designing Your Life
Gadeken, Kara	ES 1090	I	ES		Intertidal Ecology
Gadeken, Kara	ES 4066	MA	ES		Estuaries
Gibson, David	MD 4014	MA			Building Science and Energy Auditing
Graham, Carrie	ES 2037	IM	ES		Introductory Entomology
Hall, Sarah	ES 1038	I	ES		Geology of Mt. Desert Island
Henderson, Jonathan	AD 1078	I	ADS		Shellac to Spotify: 100 Years of Recorded Music
Henderson, Jonathan	AD 4057	MA	ADS	Yes	Music for Narrative Media
Ialeggio, Anna	AD 1079	I	ADS		Introduction to Ceramic Sculpture
Khor, Su Yin	HS 1110	I	W HS		Food and identity in writing: Multimodality in composition
Lakey, Heather	HE 1010B	I	HE		Human Ecology Core Course
Lakey, Heather	HS 2096	IM	HS		Nature, Humans, and Philosophy
Little-Siebold, Todd	HS 2061	IM	HS HY		Indigenous America
Little-Siebold, Todd	HS 3040	M	HS HY		History of Agriculture: Apples
Longsworth, Gordon	HS 2020	IM	HS		Geographic Information Systems I: Foundations & Applications
McKown, Jamie	HE 1010C	I	HE		Human Ecology Core Course
McKown, Jamie	HS 1102	I	HS HY		Equal Rights, Equal Voices: Articulating Suffrage
Morse, Suzanne	ES 4067	MA	ES		Special Topics in the Biology and Politics of Seeds
Nguyen, Duc Hien	HS 1119	I	HS QR		Introduction to Microeconomics
Nguyen, Duc Hien	HS 1125	I	HS QR		The Price of Knowledge: Economics of Education
Pena, Karla	HS 1117	I	HS	Yes	Spanish: Immersive Beginning I
Pena, Karla	HS 1118	I	HS	Yes	Spanish: Beginning II
Pena, Karla	HS 5067	A	HS	Yes	Spanish: Communication and Discussion
Sebastian, Neeraj	AD 4046	MA	ADS		Drawing Intensive / Developing a Studio Practice
Sebastian, Neeraj	HE 1010F	I	HE		Human Ecology Core Course
Slabach, Brittany	ES 2010	IM	ES		Ecology: Natural History
Slabach, Brittany	ES 3104	M	ES		Vertebrate Zoology
Stabinsky, Doreen	HS 4116	MA	HS	Yes	Political Economies of Carbon
Taneja, Palak	HS 2115	IM	W HS		College Seminar: The World of Ms. Marvel
Taneja, Palak	HS 3134	M	HS		The Empire Writes Back
Todd, Sean	ES 1022	I	ES		Introduction to Oceanography
Todd, Sean	ES 2030	IM	ES		Marine Mammal Biology I
Tsygankova, Valeria	HS 1126	I	W HS		Pushing the Boundaries of the Essay
Turok, Katharine	HS 3131	M	W HS		Writing Goes Wild: Environmental Adventures and Impacts
van Vliet, Netta	HS 1120	I	HS		Introduction to Cultural Anthropology
van Vliet, Netta	HS 2120	IM	HS		Marx and Marxisms

Faculty	Course#	Level	Degree Req?	Instructor Permission?	Coursename
Waldron, Karen	HS 4117	MA	HS		Intersectional Voicing: Modern US Women Novelists
Weber, Jill	ES 2014	IM	ES		Trees and Shrubs of Mount Desert Island
Winer, Joshua	AD 1026	I	ADS		Introduction to Photography
VISITING FACULTY					
Becker, Michael	HS 1117	I	HS	Yes	Spanish: Immersive Beginning I
Blotnick, Ryan	AD 3085	M		Yes	Jazz Ensemble
Earley, Annika	AD 1077	I	ADS		Fundamentals of Drawing
Earley, Annika	AD 4019	MA	ADS	Yes	Studio Printmaking
Gagnon da Silva, Pamela	HS 1053	I	HS		Intimate Partner Violence: Dynamics and Community Response
Hanson, Nathaniel	MD 2019	IM		Yes	Paddlesport Instructor and Leadership Course
Herrington, Matthew	HS 1124	I	HS		Constitutional Law: Supreme Court and Civil Liberties
Jacoby, Franklin R	HS 2098	IM	HS		Introduction to Philosophy of Mind
Koch, Galen	AD 2048	IM	ADS		Audiocraft: Writing and Producing Longform Narrative Audio
Neuhouser, Jeffry	HE 1010E	I	HE		Human Ecology Core Course
Nugent, April	MD 2017	IM			Farming the Wild
Robbins, Dani	AD 1056	I	ADS		Beginning Contemporary Dance Technique
Sands, Kerri C	HS 3062	M	HS		Solutions
Sands, Kerri C	HS 3111	M			Designing Your Life
Sigler Sibara, Josie	HS 3135	M	HS	Yes	Your Turn: Critical/Creative Inquiries in Board Game Media
Smith, Hillary	HS 3106	M	HS		Blue Food Systems
Stephenson, Toby	MD 1022	I		Yes	Working the Sea
Stephenson, Toby	MD 2018	IM			Navigation: skills, tools, and the drivers of seafaring
Sullivan , Leeann	HS 2129	IM	HS		Environmental Justice
Taylor, Davis	HS 3090	M	HS		Homesteading: Theory and Practice
Woolsey, Scott	HE 1010A	I	HE		Human Ecology Core Course

College of the Atlantic

Course Descriptions
FA-25

9/12/2025

AD1026 Introduction to Photography

Photography is a common language spoken across cultural, economic and geographical boundaries - used in news gathering, commerce and fine art. Being able to use the camera as an effective tool for self expression or in the pursuit of a documentary project is a skill which is applicable to a large number of COA students. A broad introduction to photography and digital printing, this course will introduce the principles and applied techniques of contemporary photographic practices. Designed to put the student in charge of their camera, we'll begin with basic camera controls such as aperture and shutter speed and progress on to more advanced topics such as the proper use of 'flash'. Also covered will be an introduction to Adobe Photoshop and/or Adobe Lightroom as well as good printing practices in a digital environment. Students will be evaluated on the quality of finished prints included in a final portfolio, their participation in class exercises and critiques and individual growth over the course of the term. Please note that camera equipment will not be provided. Students will need to use their own DSLR camera (with adjustable shutter speeds and f-stops) or borrow this equipment from the library which is typically lent in 4 hour blocks of time.

Level: Introductory. Prerequisites: none. Lab Fee: $110. Class Limit: 13. Meets the following requirements: ADS

AD1056 Beginning Contemporary Dance Technique

In this introductory level course, we'll work to develop a movement practice that centers both self care and togetherness. This class will draw on a variety of contemporary practitioners and methods, relying on somatosensory feedback to access availability, spaciousness, presence and pleasure both individually and collectively. Students will investigate basic patterns of choreography, experimenting with principles of velocity and momentum and exploring personal and shared movement impulses. Assigned readings, screenings, and writing assignments will complement and support our physical practice. Students will be evaluated based on attendance, successful completion of assigned work, depth of engagement during class and with course materials, and the expansion of their individual movement capacities. All class meetings will take place in-person and on campus. Participants of diverse abilities, needs, and backgrounds are encouraged to enroll. Dance experience is welcomed, but not necessary.

Level: Introductory. Prerequisites: none. Class limit: 11. Lab fee: $30. Meets the following degree requirements: ADS.

AD1060A Movement Training Basics

This course is an introduction to a wide variety of physical skills useful for anyone interested in investigating their own potential for physical research and self-expression. Techniques are derived from movement training methodologies developed for actors as well as other practices including (but not limited to) classical ballet, martial arts, circus skills, sports training, acrobatics, and improvisation. Students gain a greater sense of physical awareness and imaginative possibility, building strength, mental and physical agility, stamina and flexibility while grappling with questions regarding personal and collective responsibility, personal and collective consent and the power/politics of a specific body in a given space or circumstance. The class works to challenge preconceptions about body image and body language while working creatively and collaboratively to clarify abstract concepts through physical action. Evaluation is based on class participation (including labs/screenings and small group rehearsals), engagement with the course blog (including all introduced topics and concepts), and successful completion and presentation of a short sequence of assigned projects. Students with any or no movement experience are welcome.

Level: Introductory. Prerequisites: None. Class limit: 11. Lab fee: $50. Default grading option: Credit/No Credit. Meets the following degree requirements: ADS.

AD1077 Fundamentals of Drawing

This is an introductory drawing course. Students will work primarily from direct observation to translate what they are seeing onto paper using dry and wet media. In their drawings, students will learn how to articulate a broad range of values in charcoal and investigate how tone and line can communicate a sense of space and form. Students will learn sighting and measurement techniques to translate relative proportions across their compositions. A broad range of ideas about composition and organization of forms will be introduced by engaging with the work of artists from different parts of the world throughout history. Students will work with a variety of materials and techniques: from charcoal to ink to using collage to deconstruct and then rebuild spaces. Evaluation will be based on the completion of exercises and assignments in a way that demonstrates an understanding of the concepts and ideas introduced in the class, engagement with course materials, participation in discussions and critiques, and the

ability to respond to feedback in one's work.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: $80. Meets the following degree requirements: ADS.

AD1078 Shellac to Spotify: 100 Years of Recorded Music

Around one hundred and fifty years ago people's relationship to sound and listening began to fundamentally change. No longer just an ephemeral phenomenon, sound became a thing that could be captured, stored, and played back. The first sound recording technology, the Edison Tin Foil Phonograph, induced a minor social panic; people described being unsettled by the uncanny experience of listening to voices from the past. We now take this ability to listen and re-listen to events from the past for granted as we stream music into our earbuds, enjoy the heightened emotions brought on by a film or television score, or feel our bodies resonate with rumbling bass frequencies at a dance party. Shellac to Spotify: 100 Years of Recorded Music explores how music and technology have coevolved over the past hundred years to shape our relationships to sound, music, and listening. We will approach these questions with both hands-on assignment and from the perspectives of the academic fields of ethnomusicology and sound studies. Students will experiment with music technologies: creating an analog cassette mix tape, soldering together a theremin, composing with analog synthesizers, conducting low-power radio transmissions, experimenting with autotune and digital sequencers, exploring algorithmic music composition, and learning the basics of sound recording and editing in a digital audio workstation (DAW). In addition to weekly hands-on activities, students will read academic texts exploring how the intersection of music and technology reflect and condition social values, norms, and ways of knowing the world. For a final project, each student will create a short podcast that examines a musician, song, or music technology in historical and social context. Student assessment will be based on attendance, the completion and thoroughness of assignments and projects, participation in seminar discussions, and the end-of-term podcast project.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: $70. Meets the following degree requirements: ADS.

AD1079 Introduction to Ceramic Sculpture

Clay is a unique sculptural medium that can be highly technical and precise, a glorious gestural mess, and/or all points in between! This is an introductory studio course centered on hand-building in clay: pinch, coil, slab, extrusion, and molds. Through a series of technical and conceptual projects, we will engage the shifting intertidal zone between "form" and "function" as it may manifest through diverse cultural, material, and historical frameworks. Along the way, students will develop their own unique, expressive approaches to the possibilities and limitations of working with clay. (Note: this class does not include instruction on the wheel.) Students will be thoroughly immersed into the processes and techniques of handbuilding in mid-fire clay and in maintaining the studio itself. Students will acquire a practical introductory understanding of the material and chemical transformations present in ceramic processes. Through presentations and readings, we'll explore a selection of global, historical and contemporary ideas and practices in ceramic craft and sculpture. We'll put all of this together in search of new ways to communicate and experience ideas through three-dimensional forms in space.

Evaluation is based on participation in class activities: exercises, readings and discussions, significant studio time outside of class, several short writing and/or drawing assignments, timely completion of all creative projects with corresponding group feedback sessions, and consistent studio maintenance.

Leve: Introductory. Prerequisites: None. Class limit: 12. Lab fee: $120. Meets the following degree requirements: ADS.

AD1080 Frame by Frame: Hand-Drawn Animation

This production course introduces students to the art of hand-drawn animation: creating the illusion of motion through sequential drawings. Since its evolution in early cinema, animation has been embraced by artists, filmmakers, and scientists as a tool for conjuring magic, visualizing the unseen, crafting compelling character narratives, and evoking poetic abstraction. Exploring these histories, we will begin to uncover the conceptual and emotional potential that time and motion can bring to handmade drawings. Students will complete a series of foundational animation assignments to develop a theoretical and technical understanding of timing, motion, locomotion, composition, and other ingredients that make up an animated world. Our approach will be rooted in experimental and research-based animation, prioritizing concept and creative expression over narrative conventions, yet equipping students with classical animation principles to create the "illusion of life" and foster legibility. Students will be encouraged to develop their personal artistic style, understanding animation as a mode of fine art. The course will introduce a variety of drawing tools including traditional materials on paper and light boxes, cameraless direct animation techniques on 16mm film, and digital drawing tablets for virtual canvases. Technical instruction will cover the essential basics of moving image software such as Dragonframe, Adobe Photoshop, and Adobe Premiere Pro. Screenings of historical and contemporary animated films, along with readings on animation theory, will provide historical and philosophical contexts. We'll embrace animation as an art form primarily based on movement rather than conventional drawing skills, so while familiarity with basic drawing concepts will be helpful, the

only prerequisite is curiosity and enthusiastic commitment to create many, many drawings. Evaluation is based on the successful completion of animation exercises and experiments, critical engagement with reading/screening materials, and thoughtful participation in critiques and class discussions.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: $50. Meets the following degree requirements: ADS.

AD2048 Audiocraft: Writing and Producing Longform Narrative Audio

How do you use sound and story to build tension and hold attention? In this course, students will explore longform narrative storytelling using sound as their medium. Through reading and listening assignments, students will develop skills to identify narrative devices, critique story structure, and gain inspiration about the possibilities of sound as a narrative tool. Students can expect to complete short exercises and prompts at the beginning of term, aimed at developing story outlines and experimenting with story structure. We will discuss how to develop a longform story from an idea to a fully-realized production; whether working in fiction or non-fiction, students will hone research skills and draw from multiple sources of inspiration for their work. This course will focus heavily on writing and scripting, and integrating sound design with storytelling. Students will produce one longform audio story by the end of term, this story can be a work of fiction, non-fiction, or it can blur the lines between the two. This class is an opportunity for students to stretch audio and storytelling muscles and to experiment with form to create a polished 20-minute audio story. Students can expect a highly collaborative and supportive class atmosphere; we will use class time for workshopping, critique, and collaboration as well as class discussion.

Students will be evaluated based on their participation in class discussions, their preparedness with assigned materials, and their commitment and completion of exercises and a longform narrative audio story. This class will require independent work; students should be prepared to record, write, and edit audio outside of class time.

Level: Introductory/Intermediate. Prerequisites: While not required for the course, experience editing in a Digital Audio Workstation is helpful. Students with no audio editing experience will receive additional support from the instructor or teaching assistant and should expect to work a bit more outside of class at the beginning of the term. Class limit: 12. Lab fee: $0. Meets the following degree requirements: ADS.

AD3085 Jazz Ensemble

In this intermediate-level course we will form a medium-sized ensemble to rehearse and perform jazz music. Some prior experience with improvisation is required, as well as an ability to read music or to learn quickly by ear. Rehearsals will focus on playing with good time, intonation, feel, blend, while respecting various stylistic and historical elements of jazz. Emphasis will be placed on improvisation, which will be taught from the ground up with a focus on ear-training and harmony. There will be a concert performance toward the end of the term and there is the potential for additional off-campus performances and jam sessions. Students will be evaluated based on attendance, commitment to learning the material, successful completion of assigned work, and the expansion of improvisational ability. Participants of diverse abilities, needs, and backgrounds are encouraged to apply, including those who play non-traditional jazz instruments. This course is scheduled from 11:10-2:25 with a break for lunch. The second studio block will at times be used for small group work and other assignments as needed.

Level: Intermediate. Prerequisites: Some improvisation experience; Ability to read music or learn music quickly by ear. Class limit: 8. Lab fee: $30. Meets the following degree requirements: ADS.

AD4019 Studio Printmaking

Printmaking is the process of transferring an image from one surface to another. A print mirrors the surface whence it came and also performs as a reflection of the physical and/or immaterial realms of objects and ideas. Representing concepts clearly in any medium requires an artist to engage in thoughtful collaboration with materials in order to realize the potential of form as a means of expression. This studio course will explore ways to address this aesthetic challenge through printmaking. Students will acquire basic skills as printmakers with an emphasis on relief (woodcut and linocut) and intaglio (line etching, engraving and aquatint) techniques. They will also develop a broad understanding of the history of prints; how they have functioned to communicate, document, and transmit information through images on paper. Students will be evaluated on their projects, participation in critiques, level of engagement with materials, ability to work in a collaborative studio, and final project.

Level: Intermediate/Advanced. Prerequisite: Permission of the instructor, Introduction to Arts and Design, and a drawing class. Class limit: 8. Lab fee: $200. Meets the following degree requirements: ADS

AD4046 Drawing Intensive / Developing a Studio Practice

In the first part of this course, drawing will be used to experiment, interrogate and expand different aspects of one's artistic

practice. Using a broad range of materials, students are encouraged to work intuitively and take multiple approaches to presenting ideas–especially ideas that may not have been explored previously in their work–and develop them in different ways. Students will create large quantities of drawings based on prompts that will then be discussed with the class. What stands out? What makes a piece surprising or interesting? What revisions can be made to strengthen these moments or motifs? These are kinds of questions that will inform our discussions.

Taken together, these drawings will offer a broad range of possibilities that will then be explored for the rest of the term, during which students will develop a body of work. Students will meet weekly as a group to discuss work made or advanced in the previous week and meet individually with the instructor every other week to discuss materials and other aspects of their art practices. The work made over the course of the term should include material investigation (why are you using the materials you're using and how does it support your thematic interests?) and embody a range of conceptual concerns. Throughout the term, students will be introduced to several artists' working methods. Students are expected to work independently and have some degree of familiarity with the materials they choose to work with.

"Drawing" is used broadly here: students working in any medium are encouraged to take this course (for example, a student interested in three-dimensional work might respond to the prompts with forms made from cardboard or other found materials). This course is designed to kickstart a nascent practice or one that might have become dormant or plateaued as well as give students room to experiment and then build on these experiments. Students enrolling in this class should have some form of previous studio experience. Evaluation will be based on students' work, participation in class discussions, the ability to offer critical and constructive feedback to one's peers, and the ability to push oneself beyond one's comfort zone or perceived limitations—especially when it comes to allowing the work to evolve and change in response to feedback and critique.

Level: Intermediate/Advanced. Prerequisites: At least one ADS course. Class limit: 8. Lab fee: $100. Meets the following degree requirements: ADS.

AD4057 Music for Narrative Media

How does music work to amplify the meaning and motivation of narrative artwork? Music for Narrative Media is a practice-based course focused on creating music for narrative forms such as theater, film, and podcasts. The class will open with critical listening-viewing of various narrative media to analyze how music supports storytelling. Each member of the class will carry out structured weekly assignments in music composition that will involve a variety of tools and approaches (beginning with an instrument, beginning on the page, working with digital tools, working with field recordings, etc.). These prompts will invite an iterative process of creating a series of brief musical sketches that are then selected from and further refined. Throughout the term, we will find opportunities to collaborate with students working on films, podcasts, theater or dance pieces, or other media. This process will mirror the kind of work that composers regularly undertake: developing a collaborative vision with other artists. Student assessment will be based on attendance, the completion and thoroughness of assigned projects, participation in critique/feedback sessions, and a mid-term project profiling a composer/sound artist. Working knowledge of an instrument (acoustic, electric, or electronic) is a prerequisite, but you need not have composed music before. You will need to take musical risks and trust in the dynamics of group collaboration and revision. Level: Intermediate/Advanced Permission of instructor is required to ensure preparedness.

Level: Intermediate/Advanced. Prerequisites: Working knowledge of an instrument (acoustic, electric, or electronic) is required. Class limit: 12. Lab fee: $25. Meets the following degree requirements: ADS.

ED5016 Student Teaching Internship

The student teaching internship represents the student teaching requirement for COA'S teacher certification candidates. Success in this experience is a pivotal criterion in the student's certification candidacy. The student is placed in a school, usually in the immediate region, with a cooperating teacher who teaches subjects and grade levels that match the certification goals of the student. The roles of student teacher, cooperating teacher, school principal, and COA supervisor are discussed and agreed upon in advance. Incrementally, the student teacher becomes familiar with class routines and gradually takes responsibility for teaching. Within the 15-week experience, the student teacher must take on a full load (all classes and all duties) for the number of weeks agreed upon by all parties. This period of time varies with subjects, grade level and specific student goals. The COA supervisor visits the schools in a liaison capacity, and also evaluates the student teacher's performance a minimum of eight times in the term. Student teachers meet together regularly to discuss such issues as curriculum planning, instruction, best teaching practices, classroom learning environment and broader educational issues. Students may use student teaching to fulfill the COA internship requirement if it is completed prior to graduation.

Level: Advanced. Prerequisites: Permission of Ed Studies Program Director. Meets the following degree requirements: ED

ES1022 Introduction to Oceanography

Planet Earth is misnamed. Seawater covers approximately 70% of the planet's surface, in one giant all-connected ocean. This ocean has a profound effect on the planet's climate, chemistry, ecosystem, and energy resources. Billions of years ago life began there, in what now we regard as the last unexplored frontier of this planet. In this course we examine the various disciplines within oceanography, including aspects of geology and sedimentology, chemical, dynamic and biological oceanography. The course concludes with an introduction to marine ecosystems examined at various trophic levels, including phyto/zooplankton, fish and other macrofauna. Fieldwork (weather dependent) includes trips on RV Indigo, trips to intertidal and estuarine ecosystems, and possible visits to the college's islands, Mount Desert Rock and Great Duck Island. Evaluation will be by lab, quizzes and a final paper.

Level: Introductory. Lab fee: $200. Class limit: 15. Meets the following degree requirements: ES

ES1038 Geology of Mt. Desert Island

This course is designed to introduce students to geological concepts, tools of the trade, and to the geological history of Mount Desert Island. Throughout the course, students will learn skillsets (topographic and geologic map reading, orienteering, field observation, note taking, field measurements) and geologic principles (rock types, stratigraphy, plate tectonics, earth systems, geologic time, surface processes) both in the classroom and in the field. We will conduct multiple short field excursions on MDI and one extended weekend field trip to explore the regional geology. Students will submit a term project complete with their own field data, maps, photos, and analysis of the local and regional geology. Students will be evaluated on the term project, short quizzes, additional written assignments and lab reports. Offered every fall.

Level: Introductory. Prerequisites: none. Class limit: 14. Lab Fee: $50. Meets the following degree requirements: ES

ES1056 Physics and Mathematics of Sustainable Energy

In this course students will learn content and skills so that they can participate effectively in sustainable energy projects, make personal and community decisions that reduce carbon emissions, and work in ventures in sustainable energy. Additionally, this course will be useful for those interested in energy and climate policy, either internationally or domestically. We will begin with a quick overview of current CO2 emissions levels and look at how this is related to energy use. We will then turn our attention to basic ideas from physics, including the definition of energy and the difference between energy and power. The bulk of the course will consist of a survey of different forms of energy consumption and generation. Throughout, we will quantitatively analyze technology from both a local and global point of view. For example, we will calculate how much electricity one can generate on a rooftop, and we will also examine the role that solar PV could play toward the goal of eliminating fossil fuel use worldwide. In a unit on financial mathematics, students will learn about the time value of money and several ways of quantifying investments, including ROI (return on investment) and IRR (internal rate of return). Students will apply these financial tools in several short case studies. If time permits, we may also cover negative emissions technologies and the electrical grid, including grid stability issues and the potential of smart-grid technology. This will be a demanding, introductory, class. Evaluation will be based on weekly problem sets.

Level: Introductory. Prerequisites: None. Class Limit: 30. Lab fee $10.00 Meets the following degree requirements: QR ES

ES1090 Intertidal Ecology

The intertidal occupies the space on the ocean shore between the highest and lowest extents of the tides, and the organisms inhabiting the intertidal must adapt to an ever-fluctuating environment. It is unique among ecosystems in that it condenses and concentrates many ecological processes along a strong physiological gradient, and so serves as an ideal environment to observe and investigate fundamental ecological principles.

In this course, you will be introduced to the many diverse intertidal ecosystems of coastal Maine, from rocky shorelines to tidal mudflats to salt marshes. Through discussions in class and observations in the field, we will endeavor to answer the questions:

What organisms are found in the intertidal, and how are they adapted to life there?
How is the distribution of intertidal organisms dictated by living in a transitional environment?
How do intertidal organisms interact with each other, and how does this shape the community?

We meet twice per week for class time with one afternoon lab period. During lab time we will be going on field trips as much as possible to explore the local intertidal habitats. This course is intended as an accessible introduction to marine community ecology and field work. Assessment is based on weekly question sets, lab assignments, and a short research proposal.

This course is a partner course to Ecology: Natural History, meaning we explore the same topics just in different environments. Therefore, students may enroll in either Intertidal Ecology or Ecology: Natural History but not both.

Level: Introductory. Prerequisites: None. Class limit: 16. Lab fee: $40. Meets the following degree requirements: ES.

ES1093A Introduction to Computer Science: Data

As our access to data and compute power have increased, more and more disciplines rely on computer science techniques to analyze, visualize, and process information. As such, coding skills and computational thinking are increasingly important for work in a wide variety of fields and disciplines. This course is an introduction to computer science, designed to teach students general computational skills and habits of mind that will be immediately useful and practical, and which will also prepare them for further study in computer science and related areas. Students who successfully complete this course will be able to: read a simple program and correctly describe the outcome, take a problem statement and convert it into code, and gain an understanding of how basic computer memory works and why this matters. Topics covered will include conditionals and loops, data types, functions, as well as higher-level concepts such as abstraction, version control, and debugging. The context for this class is data; students will learn how to import and generate data, manipulate and transform it, and visualize it.

This course is intended for students who have little to no computer experience and who are interested in learning the foundations of computer science through projects that require working with data. We will use examples in class and you will implement projects throughout the course where we both generate and use data coming from across the physical, natural, and social sciences. It will be helpful if you are interested in data, but no prior experience with any particular type of data is necessary.

The course is taught in Python. Students will be evaluated on weekly quizzes and weekly projects. This course, or the equivalent, is required for many further courses in computer science, machine learning, data science, robotics, and related areas.

Level: Introductory. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: QR.

ES2010 Ecology: Natural History

This course emphasizes field studies of the ecology of Mount Desert Island, incorporating labs and field trips. Each exercise focuses on a central ecological concept. Topics include intertidal biology and diversity, forest trees and site types, bedrock geology, soil biology, insect diversity, pollination ecology, freshwater biology, predation, herbivory, and the migration of birds. Discussions include the development of natural history as a science and the role of natural selection in the evolution of diversity. Students are expected to keep a field notebook or journal, to undertake a project, and to write a term paper. Class meets for two lecture sessions and one lab session or two field/lab sessions per week. The course is particularly appropriate for students concentrating in Environmental Education.

This course is a partner course to Intertidal Ecology, meaning we explore the same topics just in different environments. Therefore, students may enroll in either Ecology: Natural History or Intertidal Ecology but not both.

Level: Introductory/Intermediate. Prerequisites: None; field work involves strenuous hiking. Class Limit: 11. Lab fee: $95. Meets the following degree requirements: ES

ES2014 Trees and Shrubs of Mount Desert Island

This course introduces you to the native and ornamental shrubs and trees of Mount Desert Island. Lectures will cover basics of plant taxonomy and forest ecology focusing on the dominant woody plant species of the region. Laboratory and field sessions will involve the identification of woody plants and an introduction to the major woody plant habitats of the island. The course is designed to teach botany and plant taxonomy for students interested in natural history/ecology, forestry, and landscape design. Evaluations are based on class participation, weekly field/lab quizzes, a plant collection, and term project.

Level: Introductory/Intermediate. Recommended: some background in Botany, Ecology. Offered every year. Class limit: 16. Lab fee: $40. Meets the following degree requirements: ES

ES2030 Marine Mammal Biology I

This course provides an introduction to the biology and natural history of marine mammals, specializing in species resident within the North Atlantic. Topics covered include: phylogeny and taxonomy; anatomy and physiology; behavior; sensory ecology; and management/conservation issues. The course includes field trips to observe animals in their natural habitat, dissection of specimens, and exposure to the professional peer review field. Students are expected to complete two individual literature-based

reviews, one species- and one system-based, to be presented in class. Assessment is based on class participation, presentations as well as written submissions. Lab fee covers costs of field trips, including potential boat and field station time, and optional travel to a regional conference during the term. Offered every other year.

Level: Introductory/Intermediate. Prerequisite: Biology: Form and Function, Biology: Cellular Processes of Life, and a writing-focused class or permission of instructor. Class limit: 12. Lab fee: $275. Meets the following degree requirements: ES

ES2037 Introductory Entomology

Nearly 80% of all described species belong to the class Insecta. Due to their abundance, diversity and adaptability, insects are crucial components of terrestrial, freshwater and human-made ecosystems. Students with a background in entomology can apply their knowledge of insects to many other fields, including botany, ecology, anthropology, epidemiology and medicine, agriculture, climate change, visual arts, history, and even the culinary arts. This course will give students a sampling of entomological applications within these diverse fields. Students will be given a solid introduction to insect biology, ecology, taxonomy and identification through lectures, lab sessions and field trips. They will assemble their own insect collections and will learn to identify all Maine insect orders and many common insect families. Lectures, field trips and readings will emphasize the important role of insects in human lives and our impact on the environment. Students will be evaluated on their insect collections, performance on lab quizzes, participation and one paper with presentation.

Level: Introductory/Intermediate. Prerequisites: Bio 1 or permission of instructor. Class limit: 16. Lab fee $35. Meets the following degree requirements: ES

ES3104 Vertebrate Zoology

In this course, we will explore the phylogenetic, morphological, and ecological diversity of vertebrates within an evolutionary framework. Using a comparative approach, we will explore the diversity of major vertebrate groups, with a focus on local representatives; interpret major evolutionary transitions; and identify the relationships between structure and function. We will practice developing hypotheses about vertebrate ecology and evolution, considering morphological, behavioral, ecological, and life history traits. The laboratory component will be a mixture of work with museum specimens, dissections, and fieldwork. We will focus on nomenclature of anatomy, standard necropsy and identification techniques, including use of taxonomic keys. Fieldwork will introduce methods to survey and monitor vertebrates, including standard capture, handling, and marking techniques. The laboratory is scheduled with early field mornings in mind. Days we are not conducting field work, we will meet later for lab. There is a required weekend field trip. This class involves a fair amount of reading and memorization to help develop a strong foundation in the taxonomy of vertebrates, as this course is a prerequisite for other advanced vertebrate courses. Assessments include quizzes, a lab/field journal, a practical, and a final written “dream project” on a vertebrate ecology and evolution question of your choice.

This course serves as a prerequisite for ornithology, herpetology and mammalogy courses.

Level: Intermediate. Prerequisites: ES1054 Biology: Form and Function and a course in ecology. Class limit: 11. Lab fee: $75. Meets the following degree requirements: ES.

ES4066 Estuaries

The simplest definition of an estuary is a place along a coast where freshwater and saltwater meet; however, estuaries are far from simple. They are complex systems driven by a fascinating network of interactions and feedbacks. This course offers a comprehensive exploration of estuaries as complex systems, integrating their physical, chemical, biological, and ecological processes. We will cover advanced topics such as estuarine hydrodynamics, sediment transport, productivity, ecosystem function, and biogeochemical cycling. Every estuary is different and throughout the course we will examine case studies of different estuaries, developing a global perspective on their variety. After building a foundation of knowledge on estuarine processes, we will explore how these systems respond to perturbation, how they exercise resilience, and how pivotal features of estuarine networks can be drastically altered by human activities. Estuaries are at the intersection of myriad anthropogenic influences and are critical environments supporting human survival, health and happiness. Together we will explore the various ways that humans interact with and affect these systems.

We meet twice a week for in-class work, and once every other week for an extended afternoon lab session when we go on field trips to explore local estuaries. The course also involves one required weekend field trip to a far off-site estuarine system. Assessment in the course will be based on case study problem sets, reading responses, and a term project.

This course is intended as an advanced offering for students interested in environmental research, management, and/or restoration.

A solid background in marine biology, environmental science, or related disciplines is essential to succeed in the course. Experience and comfort with mathematics (particularly the basics of calculus) will also be very beneficial. If you are unsure of whether you have the math skill set for this course, I encourage you to reach out to me.

Level: Intermediate/Advanced. Prerequisites: Introduction to Oceanography and Marine Biology or Intertidal Ecology. Class limit: 10. Lab fee: $150. Meets the following degree requirements: ES.

ES4067 Special Topics in the Biology and Politics of Seeds

The aim of this practicum is to pursue a collaborative project with seed workers at the local, national, or international level. A basic background and interest in seeds will be critical to a student's success in this course. The course will examine key readings in the field of seed systems and investigate the practice of different seed workers. This course will involve fieldwork outside of class time. In the first few weeks of class, we will review the foundation of angiosperm seed biology and develop skills in plant trials, evaluation, harvesting and processing. The term-long project may include an expansion on the Maine Heirloom Seed Project, a seed library serving Hancock County, archival research of the rich history of the beans and their uses across Maine, or a project proposed by one of the participants in the course. Evaluations will be based on research, participation, and sustained engagement with peers and stakeholders in the larger community, and a final presentation to the stakeholders of the project.

Level: Intermediate/Advanced. Prerequisites: Seeds, Plants and People, Biology: Form and Function are helpful. Class limit: 12. Lab fee: $50. Meets the following degree requirements: ES.

ES4068 Tutorial: Human Anatomy and Physiology

This course is an intensive partially lab based tutorial---designed for students interested in pursuing medicine or biomedical research---that examines aspects of human anatomy and physiology, with particular emphasis on the digestive system, reproductive physiology, the circulatory system, immune response, and elements of nutrition and neurophysiology. The course will emphasize the relationships between anatomy and physiology and will include a focus on basic principles of biochemistry, the form and function of musculoskeletal system, digestion, nutrition, osmoregulation, and circulation. The class meets twice a week for lecture discussion and lab. Evaluation will be based on weekly quizzes, a midterm, a final, and participation. Readings include a standard pre-medical text and some primary literature.

Level: Intermediate/Advanced. Prerequisites: Introductory courses in Biology and/or Chemistry preferred. Class limit: 5. Lab fee: None. Meets the following degree requirements: None.

HS1032 Acadia: Exploring the National Park Idea

Using Acadia National Park as a case study, this course will explore the various facets of "the national park idea" and what it means for Americans in terms of history and identity. Through direct experiences in one of the "crown jewels" of the park system, the class will examine the historical, ecological, cultural, social, legal, economic, and spiritual context in which national parks are formed and continue to exist in the 21st century. We will work with National Park Service professionals to look at various aspects of park management and day-to-day challenges of implementing the "national park idea." Through weekly field trips, journaling, service learning opportunities, and projects, we will be immersed in the management and experience of Acadia. We will explore, through reading and writing, the broader themes of wilderness preservation, attitudes toward nature, the history of conservation, and the commodification of nature. This experiential class is specifically geared toward first-year students and they will be given preference for enrollment. Assignments will include journal writing, short exercises, a group project/service learning opportunity, short presentations, and papers.

Level: Introductory. Prerequisites: none. Class limit: 20. Lab fee: $50. Meets the following degree requirements: HS

HS1053 Intimate Partner Violence: Dynamics and Community Response

From a historical perspective domestic violence has been noted as primarily a "women's issue". We now recognize the misuse of power and control in relationships as a complex and prevalent social issue that profoundly impacts our society as a whole. To address the complexity of domestic violence we must strive toward changing the belief systems that allow this problem to exist. Together we will explore these belief systems by examining the aspects of culture that shape and support domestic violence on individual, community, institutional, and global levels. We will review the history of the domestic violence movement, including its roots in the women's movement and how that movement grew into a network of victim-centered services and community-based advocacy responses. As a student you will learn how best to respond to victims of intimate partner violence, and how to apply the core principles of individual, community, institutional, and social change advocacy. You will be challenged to consider and reflect upon your own beliefs and cultural lenses throughout the course. The class format includes lectures, role-plays, media presentations, interviews with guest speakers, group work, and discussions. Opportunities will be provided for students to reflect

upon experiences, to practice skills, and apply new learning through community and cultural change projects. Students will be evaluated on their critical thinking, analysis, and synthesis of the course goals and objectives as demonstrated by participation in class activities (responsiveness to required and suggested readings and materials, guest and peer generated discussion), personal culture analysis (personal reflection, self-evaluation).

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: $10. Meets the following degree requirements: HS.

HS1102 Equal Rights, Equal Voices: Articulating Suffrage

This seminar will provide an in-depth exploration of public speech texts by a wide array of 19th century woman suffrage activists in the United States. This includes works by those individuals most often associated with the first wave of the movement including: Susan B. Anthony, Elizabeth Cady Stanton, Sojourner Truth, Frances Ellen Watkins Harper, Ernestine Rose, Anna Dickinson, Lucretia Mott, Victoria Woodhull, as well as other activists who are generally less well known today. While this is a course rooted in the history of what we might consider early American feminism, it should come as no surprise that, along the way, we will confront issues that continue to have salience today. Many of the topics surrounding gender, sex, identity, equality, empowerment, and political allyship that these activists wrestled with are still just as relevant for us to consider in our contemporary context. This is especially true when it comes to the topic of race and the intersectional nature of the discourse around gender equality, both then and now. We will spend time examining how the idea of race was rhetorically constituted, in both exclusionary and inclusionary ways, within these texts. We will also look specifically at the works of early Black feminists in the United States, and the myriad of ways they navigated the challenges of the moment, especially as they confronted a deeply embedded legacy of white supremacy within the early woman suffrage movement. Rather than rely primarily on secondary historical accounts, there will be a heavy emphasis on the close reading of primary source materials, mostly speeches, as we encounter these speakers "in their own words." In addition, students will also take part in "hands on" recovery projects designed to locate, transcribe, document, and make broadly accessible works from the period that have been previously undocumented or left unaccounted for. In doing so, students will learn basic techniques for exploring and making effective use of various types of digitized historical collections that have emerged in recent years. Class sessions will be organized as a discussed based seminar. Assignments will emphasize critical, reflective, and analytical writing. Evaluation will be based on participation in class discussion, short written response papers, two longer form take-home essays, individual presentations, and a final "recovery" project. Students interested in topics related to gender, politics, historical research, and activism are especially encouraged to enroll. This is an introductory class and open to all students regardless of whether they have a previous background in feminism, social theory, US history, or politics.

Level: Introductory. Prerequisites: none. Class limit: 12. Lab fee: none. Meets the following degree requirements: HS, HY

HS1110 Food and identity in writing: Multimodality in composition

It feels like pizza has always been considered American, but we know that it was originally brought to the US by Italian immigrants. Both the US and Italy claim pizza as a national dish, and this type of debate about where food comes from—and who it belongs to—is highly connected to our national and local identities. As humans continue to migrate across borders and blur the boundaries in digital spaces, our identities continue to develop as we interact with each other and different types of food. We will consider how this movement shapes our ideas of 'foreign' and 'local' and how one becomes the other, as well as the line between honoring a culture and appropriating it.

We will examine the intersections of the genre conventions, rhetorical situation, and the writers' identities to understand how these elements work together when producing texts. We will learn key composition concepts (genre, rhetorical situation, and multimodality) and support the
development of your genre research skills. We will use these concepts and conduct genre research to examine various food writing genres, such as narratives, recipes, and social media posts to understand how writing is an activity that goes beyond putting words together on a piece
of paper. These activities will support your overall genre research skills and deepen your understanding of writing, which can be transferred to other writing activities beyond this course. Classes will be based on genre analysis activities and group discussions. We will read works that address food writing genres and identity, and we will watch documentaries that explore the intersections of food, identity, and migration. Course assignments include your reproduction of a food writing genre, weekly reading responses, reflections and narratives to document your learning trajectory, which will also be used for assessment purposes.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: None. Meets the following degree requirements: HS, W.

HS1117 Spanish: Immersive Beginning I

This course is immersive and interdisciplinary. Students work exclusively in Spanish, and the language is always taught through

the cultural context of Latin America and more specifically Yucatán. Students learn not only in the classroom but also through constant interactions with other Spanish-speaking environments, fostering cultural enrichment and connection. This course is for students who have minimal experience with Spanish and are anticipating an immersion experience in a Spanish speaking context such as the Yucatán Program. Daily classes and assignments emphasize the development of basic comprehension and communication, both written and spoken. Students write, read texts, present on various topics, converse in pairs and groups, sing and dance, learn basic grammar, and develop their vocabulary. Outside of the daily classes, students organize and perform in the annual Spanish Festival. The grammatical structures developed in this course include but are not limited to: all parts of speech, such as articles, adjectives and adverbs in present tense; the use of reflexive verbs; past tense and all variety of sentence structures. This course also provides an orientation to living and studying in Yucatán, Mexico. The lab time is a specific formal orientation to immersion, building on the cultural context incorporated in daily classes. Upon completing this course, students will be able to express themselves and communicate confidently in Spanish. They will be able to share opinions, knowledge, questions, emotions, wishes, and preferences as well as petitions, greetings, congratulations and thanks using simple sentence structures. Additionally, they will have developed a basic cultural understanding, allowing them to incorporate themselves into new contexts with more ease. Evaluation is based on presentations, compositions, listening and spoken tests, written tests covering grammar, daily homework, and most importantly class participation.

Level: Introductory. Prerequisite: Instructor Permission. Class limit: 10. Lab fee: $30. Meets the following degree requirements: HS

HS1118 Spanish: Beginning II

This course is immersive and interdisciplinary. Students work exclusively in Spanish, and the language is always taught through the cultural context of Latin America and more specifically Yucatán. Students learn not only in the classroom but also through constant interactions with other Spanish-speaking environments, fostering cultural enrichment and connection. This course is intended for students with a basic knowledge of grammar and some fundamental vocabulary. Daily classes and assignments strengthen the ability of students to express themselves clearly orally and through writing. Students write, read texts, present on various topics, converse in pairs and groups, sing and dance, learn basic grammar, and develop their vocabulary. Outside of the daily classes, students organize and perform in the annual Spanish Festival. The course reviews grammar structures familiar to the students before continuing with the study of additional basic grammatical structures, which may include but are not limited to: complex sentence structures in present perfect and past continuous; imperatives; conditionals; two future tenses; personal pronouns and pronouns of direct and indirect objects; as well as more simple and compound sentence structures. Upon completing this course, students will be able to express themselves and communicate confidently in Spanish. They will be able to express general information and stories in past tenses. They will be able to express differing degrees of certainty, feelings, desires and preferences. They will also be able to express obligations, ask for permission, and explore possibilities. Evaluation is based on presentations, written compositions, listening and spoken tests, written tests covering grammar, daily homework, and most importantly class participation.

Level: Introductory. Prerequisite: Instructor Permission. Class limit: 10. Lab fee: $30. Meets the following degree requirements: HS

HS1119 Introduction to Microeconomics

Economics has a popular reputation as a field of study centered around making money and getting rich. However, for most of its history, economics has been about understanding and changing the way the world works. How do we get our dinner every night? What does it take to transform coffee beans harvested in plantations in Costa Rica to the morning cup of Starbucks across their 38,000 global locations? Why do some individuals amass unfathomable personal wealth while others face daily struggle for material survival? These questions are what economists primarily study. Whether seemingly straightforward or seemingly unfathomable, at their core these issues are about the process of social provisioning. It can be further broken down into the following questions: (i) As a society, how do we determine what to produce and how much? (ii) As a society, how do we distribute what we produce? And (iii) Who benefits from and who are harmed by our production, distribution and consumption? In this course, we will examine these questions from the perspective of individuals and firms, and we will consider the ways an individual's preference and decisions are shaped by social institutions and how they, in turn, affect other beings, both human and non-human. You will be introduced to topics such as: individual's decision making under constraints, social coordination dilemmas, firm's wage-setting and labor discipline, supply-demand and price setting, market's successes and failures, and the limits of economic growth. This course aims to increase your ability to use abstract, quantitative models to approach complex, real-world problems such as worsening economic inequalities and global climate change. Upon completion of this course, you will have developed practices of thinking critically and politically about public policies and debates. You will also expand your capacity for numerical literacy and quantitative skills such as drawing valid conclusions based on data and communicating your reasoning and results effectively and clearly. The course is especially valuable for students with interests in civic engagement,

social justices, political transformation, and sustainable development. Knowledge in calculus, statistics, and linear algebra is not necessary, and familiarity with elementary algebra will be helpful but not required. Students' learning will be assessed through problem sets and (take-home) exams.

Level: Introductory. Prerequisites: Knowledge in calculus, statistics, and linear algebra is not necessary, and familiarity with elementary algebra will be helpful but not required. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS, QR.

HS1120 Introduction to Cultural Anthropology

This course is an introduction to some of the central questions, arguments, and concepts of Cultural Anthropology. Broadly defined, "cultural anthropology" is the study of human cultures. Historically, such study has focused on explorations of difference through conducting fieldwork over an extended period of time in a specific community. Understandings of the discipline have changed over time, from definitions of it as an objective social science in the late 19th and early 20th centuries, when anthropology was dominated by European and U.S. anthropologists conducting fieldwork in places in Africa, Latin America and Asia, to definitions of it as a subjective interpretative social science that has been transformed and critiqued by anthropologists across the globe studying a wide range of human cultures and institutions, including their own societies. In the 1970s and 1980s, anthropologists began to "study up" through focusing on cultures of entities such as the World Bank, corporations, the military, scientists and investment bankers. Today, almost anything can be a focus for anthropological study.

In this class we will address questions and arguments about structure, difference, power, colonialism, politics, representation and responsibility, both in terms of cultural anthropology's own formation as a colonial discipline, and in terms of the tools for critical thinking that have emerged out of anthropological work. What kinds of social organization and economic systems tie people together? What produces conflict? What is the significance of myths, rituals and symbols? How are social systems reproduced over time? How do they change? What is the significance of relations of identification and interaction between individuals and group categories? What are the political implications of how the human is defined? As we learn about how different thinkers have engaged these questions, we will also critically examine the concepts that inform them, including ideas of agency, responsibility, representation and action. Texts will likely include work by Ruth Benedict, Lee D. Baker, Franz Boas, Jacques Derrida, Emile Durkheim, Michel Foucault, Sigmund Freud, Clifford Geertz, Zora Neale Hurston, Alfred Kroeber, Claude Levi-Strauss, Karl Marx, Sidney Mintz, Rosalind Morris, Anand Pandian, Gayle Rubin, Marshall Sahlins, Edward Said, Marilyn Strathern, Deborah Thomas, Michel-Rolph Trouillot, Victor Turner, and Eric Wolf. Course work will include engaging with ethnographic writing and ethnographic research methods, as well as with transdisciplinary encounters with anthropology, including work in literature, philosophy, feminist and postcolonial theory. Students will be evaluated on individual and small group ethnographic research and writing assignments, class participation, and weekly reading responses.

Level: Introductory. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS1124 Constitutional Law: Supreme Court and Civil Liberties

This introductory class in constitutional law will have one fundamental objective: understanding the current and historical role of the US Supreme Court in the recognition of civil and associated rights. The rights we will examine will include reproductive rights, freedom of speech in both the general and academic contexts, marriage equality, the rights of individuals in the transgender community, and racial equality. In order to understand these specific issues of Supreme Court doctrine, the class will begin with a review of how our courts function, how the doctrine of judicial review developed, and how to read and understand decisions of the Supreme Court. The question looming over the course will be whether the Supreme Court is a distinctive legal institution, an anti-democratic policy making body, or both – and whether this question can be resolved independent of our views on the underlying issues. The course will conclude with a "moot court" exercise in which students will play the role of either Supreme Court justices or lawyers appearing before the Supreme Court. The topic of the exercise will be drawn from a case or cases currently pending before the Supreme Court.

Assessment will be based on evidence that the student has completed assignments and readings, meaningful participation in seminar discussions, the preparation and presentation to the class of a summary of a judicial opinion under discussion, two short quizzes, and performance in the moot court exercise.

Level: Introductory. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS1125 The Price of Knowledge: Economics of Education

Why should we study the economics of education? One answer is the significant amount of money that individuals and society spend on education across all levels. In 2024, the United States alone spent nearly $1.5 trillion, or about 5.5% of GDP, on

education. Likewise, governments throughout the world devoted considerable resources on the financing and operation of schools. These investments in education are motivated by the belief that the strength of the economy depends on the knowledge and skills of the workers. But does higher education expenditure cause better learning outcomes? Does better test score cause higher economic growth? How do policymakers design education policies that produce skills valued by society and rewarded in the labor market? How do the organization of schooling and incentive structure affect students, teachers, parents, and learning outcomes? We will engage these questions both substantively and as a way to learn about how quantitative methods - e.g., cost-benefit analysis, and causal inference - are used to design, debate, and evaluate public policies. As such, this class is valuable for (i) students who are interested in education policy debates, (ii) who want to learn about the increasingly dominant role of causal inference models in public policy design, or (iii) who want to acquire quantitative reasoning skills through an applied, policy-oriented approach.
Topics may include return to schooling, education production function and inputs, financing of local K-12 schools, teacher labor market, incentive and students' performance, and peer effect and learning environment effect. Throughout the course, you will have ample opportunities to develop quantitative reasoning skills, including causal analysis, natural experiment, and randomized control trials. Some knowledge of introductory microeconomics is beneficial but not required. Students will be evaluated through leading group discussion of assigned reading materials and developing a summative research proposal on a relevant topic.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: None. Meets the following degree requirements: HS, QR.

HS1126 Pushing the Boundaries of the Essay

What comes to mind when you hear the word "essay"? Maybe you think of a formula for essay-writing that you learned long ago: five standardized paragraphs supporting a single thesis with little room for anything else. Maybe this formula has even given you the idea that essays are a mechanical, rulebound, and unexciting kind of writing. And yet, over its centuries-long history, essay-writing has been anything but formulaic—so much so that scholars find it impossible to agree on a set of stable essay conventions. As the editors of the Edinburgh Companion to the Essay (2022) argue, "the essay" isn't a unitary genre at all. Instead, it's a "contested space," marked by many diverse and even competing approaches. This class is a gateway to that contested space. Assigned readings will introduce you to the outer limits of the essay universe. You will meet writers like James Baldwin, Leslie Jamison, Jacqueline Rhodes, and Cathy Park Hong, among many others, who have all made their own unique mark on the tradition. You will discover writers who make linear arguments—and others who embrace digression, fragmentation, and mosaic structures; those who incorporate research and those who write from memory; those who write in one language and those who draw on multiple languages at once; those who write alphabetically and others who produce multimodal and video essays. Studying this vast range of possibilities will help you expand your own toolkit for when you find yourself writing essays for various audiences and rhetorical situations (including, eventually, senior project proposals, independent study proposals, the Human Ecology Essay, fellowship applications and more). We will mine our readings for the diverse strategies that other writers have used for pulling in their readers, communicating their claims, acknowledging others' thinking, and creating meaningful structures. You will be asked to reflect metacognitively about how you might transfer these strategies to your own writing in academic, professional, and public contexts. You will come away with an expanded sense of what counts as an "essay," as well as a sharper capacity to analyze specific essay genres—such as research articles, op-eds, and application essays—each of which comes with its own range of conventions and expectations. Moreover, you will write essays for the exciting and imaginative reasons that have motivated other writers before you: to delve into questions that don't have easy answers, to explore mysteries, to investigate the world—and yourself. Since essays incorporate so many diverse ways of making knowledge, you will also find a mix of modalities in this class: big-group discussions, collaborative analysis of readings, small-group annotation activities, individual focused free-writing, and more. You will be evaluated on 1) an essay that investigates the work of one essay writer who we will read during the term; 2) a final project (that can be a multimodal piece) in which you enact what you have learned about essayistic writing by composing an essay on an intellectual, aesthetic, or ethical question of your own choosing; 3) participation in a recursive writing process that includes reading, drafting, revision, and responding to classmates' drafts. This course meets the writing and HS requirements and has no prerequisites.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: None. Meets the following degree requirements: W, HS.

HS2020 Geographic Information Systems I: Foundations & Applications

Ever-rising numbers of people and their impact on the Earth's finite resources could lead to disaster, not only for wildlife and ecosystems but also for human populations. As researchers gather and publish more data, GIS becomes vital to graphically revealing the inter-relationships between human actions and environmental degradation. Much of what threatens the earth and its inhabitants is placed-based. Solutions require tools to help visualize these places and prescribe solutions. This is what GIS is about. Built on digital mapping, geography, databases, spatial analysis, and cartography, GIS works as a system to enable people to better work together using the best information possible. For these reasons, some level of competency is often expected for entry into many graduate programs and jobs, particularly in natural resources, planning and policy, and human studies. The flow of

this course has two tracts, technical and applied. The course begins with training in the basics of the technology. Then, skills are applied to projects that address real-world issues. Project work composes the majority of course work and each student has the opportunity to develop their own project. Because GIS provides tools to help address many kinds of issues, GIS lends itself well to the theory of thinking globally and acting locally. Projects often utilize the extensive data library for the Acadia region developed by students since the lab was founded in 1988. The GIS Lab acts as a service provider to outside organizations and students can tap into the resources of a broad network of groups and individuals working towards a more sustainable future. Course evaluations are partially based on the on-time completion of exercises and problem sets. Most of the evaluation is based on critique of student independent final project work and related documentation.

Level: Introductory/Intermediate. Pre-requisites: Basic computer literacy. Class Limit: 10. Lab Fee: $75. Meets the following degree requirements: HS.

HS2061 Indigenous America

This course will provide an introduction to the history of indigenous peoples in the Americas. Using a seminar style the class will combine some overview lectures, student-led discussion of books, and project-based learning to provide an initial introduction to the diverse histories of native peoples from Canada to the Andes. The course will focus on both pre-contact societies as well as the processes of interaction between Europeans and indigenous peoples in the Americas. Using a selection of case studies the course will highlight building an understanding of indigenous worldviews as well as socio-political organization and the ways both were transformed by colonialism. A range of books will introduce students to the ethnohistorical literature on native communities from Mesoamerica, North America, and the Andes. A simultaneous component of the course will be student's research projects on a topic of their choosing that explores a dimension of native people's histories. Students will be evaluated on attendance, course participation, short analytical essays, and their final project.

Level: Introductory/Intermediate. Prerequisites: none, however, students without any background in history should expect to invest extra time with the readings and writing assignments. Class limit: 15. Lab fee: none. Meets the following degree requirements: HS, HY

HS2093 Strategies for Social Change

People organize to bring social change for many reasons – e. g. to end oppression, bring peace, prevent ecological collapse, promote cultural survival or advance sectarian interests. The character and success of strategies depend on social and historical contexts. People typically alternate between – or combine – varied approaches including: social movements, electoral politics, lobbying, nonviolent (or sometimes violent) struggle, technological innovation, social entrepreneurship and community organizing. This course uses theories of social movements as a starting point to look at strategies for social change and criteria for evaluating them. The course assumes it is important to understand views and strategies we disagree with respectfully and with careful analysis. The class combines readings in history and theories of social change, and diverse case studies from both the left and the right. It looks both at classic cases (e. g. Gandhi, King) and a variety of efforts from recent years and the present (e.g. Indivisible, the Tea Party, #MeToo, Zapatistas, 350.org, Black Lives Matter, Cambridge Analytica, and alternative food system entrepreneurship). This is a course for students who want to develop skills for doing critical analysis of society, for developing effective plans to create social change, and for applying strategies to implement those plans. Evaluation will be based on progress in developing those skills as demonstrated in homework and class participation, short papers, and a term project developing a sample strategy document for a viewpoint of the student's choice.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS

HS2096 Nature, Humans, and Philosophy

According to COA's website, Human Ecology studies the relationships between humans and their natural and social environments. But what do we mean by "nature," and what distinguishes a natural environment from a social one? Moreover, what kinds of relationships should we cultivate with our natural environments? This discussion-based course explores the concepts of nature and environmental responsibility across different philosophical and cultural frameworks. We will draw on a variety of readings from environmental ethics, ecofeminism, deep ecology, American transcendentalism, indigenous studies, queer theory, and Buddhism. We will read selections from thinkers such as John Stuart Mill, Ralph Waldo Emerson, Ramachandra Guha, Aldo Leopold, Arne Naess, Val Plumwood, Vandana Shiva, Gary Snyder, Henry David Thoreau, Eduardo Kohn, Mary-Jane Rubenstein, Thich Nhat Hanh, Anna Tsing, and others.

Guiding questions include the following: What is nature? How is the idea of nature politicized and socially constructed? Do we have moral obligations to nature? How should humans relate to nature? What assumptions drive the conceptual distinction

between humans and nature? Although this course will focus primarily on theoretical questions, we will also discuss issues in applied ethics such as, control over natural resources, wilderness preservation, sustainability, and consumption. Throughout the course, we will revisit questions pertaining to environmental activism, and we will consider how philosophy can help us to articulate our ethical responsibilities and obligations.

Upon completion of this course, students will have gained a richer philosophical understanding of the idea of nature and they will be familiar with key debates in environmental ethics. Course requirements include weekly writing assignments, a midterm exam, a final paper, and class participation. There are no prerequisites, but students should arrive to this class prepared to engage difficult philosophical texts and to share their ideas with others.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS

HS2098 Introduction to Philosophy of Mind

What is the mind and how does it relate to the body? This two-part question will guide the structure of this introductory course in the philosophy of mind. Other questions that will arise include how can the mind influence the body? Is this distinction between mind and body deep? Is there a single discipline that can tell us what the mind is and, if not, why not? Is science of help? What strategy or method is best suited to understanding the mind? Do other cultures or religions offer insight? Is the mind inherently mysterious and unknowable?

Attempts to understand the mind have vexed and stimulated philosophers, scientists, and others since at least as far back as Descartes. Starting with his work, we'll explore classic and contemporary texts in western thought, with particular focus on philosophy, but with some psychology, neuroscience and non-western thought. We will cover a number of theories and our own assumptions about this basic and fundamental feature of human life. Some of the main accounts students will gain familiarity with include dualism, materialism, panpsychism, emergence, and phenomenology.

Evaluation will be based on participation, two short response essays, a midterm essay, a final essay, and a final presentation.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS2115 College Seminar: The World of Ms. Marvel

As a Pakistani-American teenager from New Jersey, Kamala Khan must contend with being a non-white female offspring of an immigrant family, a reality further complicated by her newfound superhero abilities. In this college seminar course, we will dive into the world of Kamala Khan as she follows in the footsteps of her role model and the first Ms. Marvel, Carol Danvers, one of the few female superheroes in the universe. She'll change your idea of a superhero and what it means to be one as she balances her personal and superhero identity and navigates questions of race, religion, culture, power, and teenage angst.

We will explore all the abovementioned ideas and more as we read three to four volumes of Ms. Marvel comics (2014 onwards), paying attention to storytelling through the genre of sequential art. We will also watch the recent TV adaptation (2022) and finally pair the two with theories of race, Islamophobia, gender, and current world politics. Since this class also meets the writing requirement, part of your focus will be on understanding the writing process by composing varied works. For example, you'll write short blog posts responding to questions like, "Are comics literature?", opinion pieces that could appear in The New York Times, and fan fiction. All these are different genres and targeted at a specific audience, me, online readers, fans, and your peers. You will be evaluated on class participation, written work, oral presentation, and a final project.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 12. Lab fee: None. Meets the following degree requirements: HS, W.

HS2120 Marx and Marxisms

This course is an introduction to the work of Karl Marx and to some of the ways his work has been taken up across a range of disciplines, interdisciplinary fields, and political projects. We will pay particular attention to his thinking about the relation between theory and praxis, and to his notions of capital, value, money, commodity, labour, ideology, alienation, internationalism and class struggle. In addition to reading Marx's own writings, we will also read work in postcolonial studies, feminist theory, cultural anthropology, racial capitalism, Black Studies and philosophy that engages with Marx's thinking. In addition to Karl Marx and Friedrich Engels, authors will likely include Louis Althusser, Charisse Burden-Stelly, Frantz Fanon, Silvia Federici, Antonio Gramsci, David Harvey, C.L.R. James, Ranjana Khanna, Rosa Luxemburg, Catherine MacKinnon, Adam Smith, and Gayatri

Spivak. We will examine the implications of Marxist analyses for questions of political and structural change, critiques of capitalism and analyses of its relation to racialised and gendered dynamics of power. In addition to academic texts, course materials will draw on films, news publications, and contemporary examples of political-economic challenges. Students will be evaluated based on class participation, weekly reading responses, collaborative small group and individual projects.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS2129 Environmental Justice

Environmental harms and benefits fall in predictable patterns across our bodies and landscapes, tracing lines of inequality that are embedded deep within our colonial history and modern societal structures. Environmental justice as a field of study represents an attempt to uncover and understand those patterns by drawing connections between harm and broader practices, laws, and procedures by state and private actors. It is also a study of resistance to harm, often led by those in marginalized communities, but increasingly led by more reluctant activists who find themselves on the losing side of capitalism's growing list of externalities, from pollution, pipelines, and extraction to land degradation and climate collapse.

In this foundational course, we will navigate frustration and accomplishment, despair and hope, and the boundaries around what's broken, and what may still be fixed, in our movement toward a more desirable future for life on earth. The course will draw on philosophy (e.g., John Rawl's Theory of Justice), history and contemporary politics (e.g., Nina Lakahni's Who Killed Berta Cáceres), and sociological theory (e.g., Naomi Klien's Shock Doctrine) to ground specific case studies and bring context to their development so that students may begin to see what drives environmental injustice and response.

This course will be of value to students at all levels interested in bridging social theory with contemporary problems so that they may develop deeper analysis of and more sustainable solutions to ongoing environmental and social problems. Over the course of the term, we will pair readings and in-class discussion with the development of a "braided narrative" that brings together lived experiences and deep research. Students will be evaluated through a combination of self-assessment, written assignments, and in-person engagement.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 12. Lab fee: $0. Meets the following degree requirements: HS.

HS3023 International Wildlife Policy and Protected Areas

"Save the whales"; "save the tiger"; "save the rainforest" - - increasingly wildlife and their habitats are the subject of international debate with many seeing wildlife as part of the common heritage of humankind. Wildlife does not recognize the political boundaries of national states and as a result purely national efforts to protect wildlife often fail when wildlife migrates beyond the jurisdiction of protection. This course focuses on two principle aspects of international wildlife conservation: 1) the framework of treaties and other international mechanisms set up to protect species; and 2) the system of protected areas established around the world to protect habitat. We begin with an examination of several seminal wildlife treaties such as the International Convention for the Regulation of Whaling, CITES, migratory bird treaties, and protocols to the Antarctica Treaty. Using case studies on some of the more notable wildlife campaigns, such as those involving whales and elephants, we seek to understand the tensions between national sovereignty and international conservation efforts. The Convention on Biological Diversity and its broad prescriptions for wildlife protection provide a central focus for our examination of future efforts. Following on one of the key provisions in the Convention on Biological Diversity, the second half of the course focuses on international and national efforts to create parks and other protected areas. In particular we evaluate efforts to create protected areas that serve the interests of wildlife and resident peoples. Students gain familiarity with UNESCO's Biosphere Reserve model and the IUCN's protected area classifications. We also examine in some depth the role that NGO's play in international conservation efforts. The relationship between conservation and sustainable development is a fundamental question throughout the course.

Level: Intermediate. Recommended courses: Use and Abuse of Public Lands, Global Politics and Sustainability, Global Environmental Politics. Class limit: 20. Lab fee: $15. Meets the following degree requirements: HS.

HS3040 History of Agriculture: Apples

This course will explore the history of agriculture from the vantage point of Downeast Maine with a focus on apples. The premise of the course is that by exploring this fascinating crop in detail from the local vantage point of Downeast Maine students will be able to grasp the many historical processes at work from the introduction of the fruit in the late sixteenth and early seventeenth centuries to the age of agricultural improvement in the eighteenth on to the rise and fall of commercial orcharding as a major component of Maine's farm economy in the early twentieth century. Using sources ranging from secondary sources, historical atlases, aerial surveys, and diaries, we will explore how the culture of apple agriculture in Maine develops over time as part of an

interconnected Atlantic World where crops flow back and forth between Britain and the colonies/U.S. over hundreds of years. Course activities will include fruit exploration and fieldtrips to track down and identify antique varieties, as well as visits to the local farms where a new generation of apple culture is taking shape. The course will also engage students with the process of cider-making, both sweet and hard, as well as exercises in the preparation, storage, and processing of apples. Students will be evaluated on their participation in discussion, how they collaborate with others in class projects, and a final individual or collaborative project. This course is designed for students interested in history, farming and food systems, community-based research, and policy/planning issues. It is also very appropriate for students who like apples and just want to know (a lot) more.

Level: Intermediate. Limit: 11. Lab Fee: $125.00. Meets the following degree requirements: HS HY

HS3062 Solutions

We live in a world of problems . . . global warming, inequality, discrimination, child labor, slavery, waste, species extinction, domestic violence and a myriad of other issues occupy the headlines, courses and can feel overwhelming at times. Unfortunately, we rarely here about solutions, let alone have the opportunity to create our own solutions for the issues that concern us and inspire us to action.

Changing the world takes more than a critical eye for what is wrong, proselytizing a good idea and hope. There are many factors which contribute to creating social change and in this course we explore what it takes to be a successful change maker in our communities, and thus in the world. Reversing the lens we use to approach the problems of the world is part of what a Human Ecologist needs to do to understand our challenges:

"...social entrepreneurs are uniquely suited to make headway on problems that have resisted considerable money and intelligence. Where governments and traditional organizations look at problems from the outside, social entrepreneurs come to understand them intimately, from within." -- David Bornstein, How To Change The World

In this experiential, project-based course students will select a specific problem they would like to solve. Students will perform thorough research into a problem of their choosing, understanding it from within by identifying root causes and other exacerbating factors as well as investigating positive deviance and what people around the world are doing to solve this issue. Through these projects and other readings, students will examine a myriad of problems around the world and look at different strategies people are using to tackle them and create positive social change. The final project for the course will be a concrete proposal for solving the problem they selected. Students will be evaluated based on their performance, participation and the quality of the projects they produce over the course of the term.

Level: Intermediate. Class limit: 15. Lab fee: $50. Meets the following degree requirements: HS

HS3090 Homesteading: Theory and Practice

This course examines homesteading as a food systems, cultural, and economic practice. Maine is a center of homesteading activity in the United States and an ideal place to study the theory and practice of homesteading. From a food systems perspective, homesteading represents a means of divesting from the global food system through the practice of subsistence agriculture and food preservation. Viewed from an anthropological perspective, homesteading raises interesting questions about why some individuals eschew conventional lifestyles and seek significant degrees of self-sufficiency, various forms of intentional living, and commitments to non-commodified production. A critical examination of homesteading raises questions about privilege and the benefits and limits of social movements founded on personal choice and private property. And viewed through political economy, homesteading can be seen as a choice to resist the intrusion of market-based relationships into social life and an attempt to restore social relationships and normative values other than efficiency to production and consumption.

Applying these lenses, this course will examine the conditions that influence contemporary homesteading practices. Three key questions frame the course: (1) What motivates self-identified homesteaders to resist normative lifestyles and seek self-sufficient, non-commodified ways of living? (2) How do variables such as class, education, race, geographic location, and property-ownership shape homesteading practices? (3) What are the benefits and limits of homesteading as a form of resistance to commodified production and consumption? Through classroom discussions, readings, and fieldwork students will attempt to answer these questions. Readings will include personal and ethnographic accounts of homesteading as well as critical studies of non-commodified living. We will be joined for several class meetings by guest discussion leaders with additional expertise in food systems, anthropology, and related areas. Field work will include visits to several homesteads. Students will be evaluated based on participation, interviewing exercises, a field journal, and a series of reflection papers.

Level: Intermediate. Prerequisites: None. Class limit: 12. Lab fee: $75. Meets the following degree requirements: HS.

HS3106 Blue Food Systems

Just three aquatic species account for most seafood consumed in the US: shrimp, tuna, and salmon. But worldwide consumption is more diverse, including an array of finfish, invertebrates, aquatic plants, algae, and other animals. These 'blue foods' are fished, collected, gathered, or grown in the sea or freshwater and play essential roles in supporting human health, nutrition, livelihoods, and culture. Recent studies have shown that the top 7 categories of nutrient-rich animal-source foods are all aquatic in origin. So why do food policy and science still heavily focus on terrestrially produced foods, overlooking blue foods? This course will unpack this conundrum and examine blue food systems from 'bait to plate' by analyzing food production, provisioning, and consumption as interlinked activities. Blue food production includes small-scale and industrial harvesting and wild capture and aquaculture systems. Provisioning activities link production and consumption: the offloading of catch, storage and transportation of highly perishable foods, transformations from raw fish to the final product, and the marketing and distribution affected to reach consumers. Finally, consumption includes how we acquire our food, cook and eat it, and dispose of waste, as well as our nutritional and health outcomes. While conventional food policy and science have focused on food production in isolation, a food systems framework sheds light on dynamics that impact the flows and distribution of foods with equity implications: which foods are made by whom, where does food go, and who benefits? This course will introduce students to key changes in the goals and means of food policy, focusing on how the emergent dialogue on food systems in fisheries is reframing how we know and govern aquatic resources. A significant portion of the course will be dedicated to examining blue food case studies, which may include: seaweed farming in Tanzania, fishing cooperatives in Mexico, tuna longliners in the Mid-Atlantic, and Lobster fishing in Maine. Students will work in teams to analyze one of these case studies in-depth, applying a food systems lens to examine each case's sustainability and equity challenges. Students will be evaluated through their participation in class discussions and in-class activities, weekly writing reflections, and co-leading a class with your case study team. The final project will be a group policy proposal outlining how stakeholders could better govern from a 'food systems' perspective in your blue food case study.

Level: Intermediate. Prerequisites: A prior course on food systems of fisheries is beneficial, but not required. Students will be (re)introduced to key concepts in the first few class sessions and apply them throughout the course. Class limit: 15. Lab fee: none. Meets the following degree requirements: HS.

HS3111 Designing Your Life

Students hear a series of conflicting messages when it comes to their education and future. Advice, impulses and pressures to "follow your passion", "study something that will lead to a job", "create positive change in the world", can be overwhelming. This is especially true at a school where students design their own major and pathway through the curriculum.

In this course, students will embark upon a journey to design their lives, while simultaneously learning from others who are seeking to balance work, life, family, education, creating change and the myriad of other quotidian tasks.

Two central questions frame this course:
How have people seeking to change the world and pursuing their passion sustained themselves personally and professionally?
How should human ecologists think about and plan their future?

To enrich the process of designing their own lives, students will also learn about the challenges and rewards people encounter when dedicating their lives to creating change. Resources include articles, guest lectures, case studies, interviews and other sources. Highlighting the essential links that exist between professional and personal, ideas and implementation, students will examine a range of careers and endeavors united by their desire to create change. Through this process, students should reflect on what it means to create change in the world and how to embark on that journey.

Students will be evaluated based on their performance, participation and the quality of the assignments they produce over the course of the term including: class participation and facilitation; reflection papers; and a final project.

Level: Introductory. Prerequisites: None. Class limit: 14. Lab fee: $40. Meets the following degree requirements: HS.

HS3131 Writing Goes Wild: Environmental Adventures and Impacts

How does the environment affect our sense of place as well as national, regional, and personal identity? Taking a multifaceted view of human relationships with nature, students will generate research projects driven by questions about tourism and eco-tourism, species population change, climate degradation, the role of technology, and development of wildlands and waterways. Research discussed in class will also center on environmental values and challenges expressed by ecocritics, naturalists, biologists, philosophers, archaeologists, psychologists, poets, filmmakers, and others from the nineteenth century to the present. Several local excursions will provide opportunities for taking field notes. Students will be encouraged to experiment with

different forms of writing, expanding their genre analysis, rhetorical awareness, and research practices, while deepening their own relationship with nature. Sharing work during peer reviews will become integral, uncovering and inspiring various writing processes.

This transdisciplinary, experiential approach will help establish a strong foundation for students' writings outside this course and for evaluating possible impacts on the environment by potential encroachments. Spanning memoir, travel, science and nature, cultural issues, and current events, short readings will include writers such as Wendell Berry, Charles Darwin, Susan Fenimore Cooper, Luther Standing Bear, Jacquetta Hawkes, Richard Wright, Edward Abbey, N. Scott Momaday, Leslie Marmon Silko, Loren Eiseley, Terry Tempest Williams, Jamaica Kincaid, Ray Gonzalez, Evelyn C. White, and Jessica Hernandez.
Evaluations will be based on fieldnotes, two research projects, and class discussions.

Level: Intermediate. Prerequisites: None. Class Limit: 12. Lab Fee: None. Meets the following degree requirements: W, HS.

HS3134 The Empire Writes Back

"You must unlearn what you have learned."
-Yoda, The Empire Strikes Back

Before there was Star Wars, there were Empires. What began with the "Age of Discovery" in the 15th and 16th centuries, helmed by Portugal and Spain, took shape with the British and French Empires in the 17th century. The British Empire, in particular, expanded to encompass almost a quarter of the globe at one point. Literature was one of the many tools in the British arsenal to assert control and claim cultural supremacy. Therefore, as the colonized Resistance grew, they used the master's tools to dismantle the Empire. In response to Joseph Conrad, there was Chinua Achebe; for Charlotte Brontë, a Jean Rhys; and for Rudyard Kipling, a Salman Rushdie.
Our job in this course will be to engage with the writings of the colonized Resistance as they developed by looking inward, unlearning, adapting, and remaking the tool of English Literature. We will read the works of some authors mentioned above and more, along with critical theory, films/documentaries, podcasts, and even some Instagram feeds. You will be evaluated based on class participation, oral presentation, response posts, final paper, and a multimodal project. This class will be good for students hoping to expand their understanding and knowledge of literature and canon formation, develop critical thinking skills, and who wish to talk about how academia influences pop culture, like Star Wars. For those still wondering why to take this class, follow Yoda's wisdom, Padawan: "Much to learn, you still have."

Students will be evaluated based on class participation, oral presentation, response posts, final paper, and a multimodal project.

Level: Intermediate. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS3135 Your Turn: Critical/Creative Inquiries in Board Game Media

In this course, we will discover what tabletop gaming has offered humanity from the Ur-game (the Royal Game of Ur, played in Mesopotamia 4500 years ago) to the "new golden age of board games" happening now. Engaging critical scholarship in the emerging field of game studies, we will discuss how theme and mechanics create narrative and meaning, as well as how historical games challenge "inevitable" outcomes. We will examine the hobby's culture with an eye toward increasing belonging and explore the medium's potential to imagine a more just and equitable world (such as the decolonizing ecology represented by Spirit Island and the Queer joy of Molly House). Class will be a mix of lab and discussion. You will play several "heavy" (high complexity) games and provide a "session report" on each (usually a 1-2 page response paper that discusses the game in depth and includes applied analysis of the theory readings). For your final project, you will propose, design, and play test your own game, writing an introduction and a rule book. Students will be evaluated on thorough and enthusiastic preparation for and participation in class and lab, written or video assignments, and the final project. This course is especially suited to students interested in history, art, mathematics, and media studies.

Level: Intermediate. Prerequisites: None. Class limit: 12. Lab fee: None. Meets the following degree requirements: HS.

HS4116 Political Economies of Carbon

Carbon is the building block of life. It is also central to one of the most critical challenges of this century: climate change. Combustion of fossilized carbon leads to the increase in atmospheric concentrations of carbon dioxide that threaten life across the planet. Trees and other living organisms that store carbon are celebrated as solutions to the growing crisis, yet rampant destruction of these carbon stores continues unabated. The global management of carbon and its impacts includes projects to decarbonize economies and recarbonize ecologies, as well as fantastical technofixes for carbon removal and blocking the sun. Who will decide how much fossil carbon ultimately gets burned? How much land will be claimed by global elites to soak up their continued fossil

emissions, and where will it be located? What role do carbon markets and geoengineering play in addressing or perpetuating fossil economies? These are some of the questions we will explore. In the course we use several different theoretical lenses that look at intersections of institutions, nature, economy, and power (critical geography, political ecology, political economy) to understand more deeply the political, economic, and ecological relationships that emerge around forms of carbon (fossil fuels, trees and landscapes, monoculture plantations) in the context of global efforts to address climate change. Topics to be covered include the carbon cycle; carbon markets; climate models; geoengineering and carbon dioxide removal; international climate treaties and global politics of governing carbon; and carbon democracy and fossil capital. The aim of the inquiry, and what students should expect to take away from the course, is a broader and deeper understanding of global political economies and local political ecologies of climate change and carbon.

Readings will come from academic as well as non-academic literature from think tanks, non-governmental organizations, and social movements. Core course texts will include Carbon Democracy by Timothy Mitchell and Overshoot by Andreas Malm and Wim Carton. The course will be conducted in a lecture-seminar format, with emphasis on class discussion of readings and lecture material.
Students will be evaluated based on engagement in class discussions, regular writing assignments and problem sets, and a final project or synthetic essay.

Students will participate virtually and/or in-person in the Conference of the Parties to the UN Framework Convention on Climate Change. In-person attendance is optional.

Level: Intermediate/Advanced. Prerequisites: One or more courses in natural or physical sciences, social theory, economics and/or politics. Class limit: 12. Lab fee: None. Meets the following degree requirements: HS.

HS4117 Intersectional Voicing: Modern US Women Novelists

This is an intermediate / advanced course in which students will explore the connections between and among modern US women's novels focusing on intersectional identities. We will strive to better understand the nature and significance of differences between as well as common patterns or themes that shape women's and intersectional/mixed-race/mixed-identity fictional narration. Historical perspective, cultural, class, ethnic, religious, other differences, and prescribed gender roles will all be relevant. We will read women's fiction by authors such as Gloria Naylor, Janet Campbell Hale, Toni Morrison, Linda Hogan, Julie Shikeguni, Sandra Cisneros, Graciela Limón, Nora Okja Keller, Cristina Garcia, Jhumpa Lahiri, Sigrid Nunez, and Amanda Peters. Participants will read carefully, prepare and ask questions of each other, write response papers, and carry out an independent multimodal project to be presented to the class. The project will focus on one or more additional texts: fictional, theoretical, cultural, or historic. Presentations will be made in groups that put the outside texts into broad cultural and historical perspective and/or discuss them in terms of trends in women's literature, immigrant literature, women's literature of the United States, multicultural/intersectional narratives, or some other course theme. The selection of the outside text for the project will give participants the opportunity to fill in perceived gaps in their reading or to explore a particular narrative or cultural form — or identity position — in greater depth. The reading load for this course is relatively heavy. Evaluation will focus on preparation, participation, insight, critical thinking, response papers, and the outside project — both its oral presentation and development in an appropriate form (visual, narrative, analytic, curricular, etc.). The course has been designed for students with previous college-level literary experience and/or an interest in gender and identity studies.

Level: Intermediate/Advanced. Prerequisites: None. Class limit: 15. Lab fee: None. Meets the following degree requirements: HS.

HS5067 Spanish: Communication and Discussion

This course is immersive and interdisciplinary. Students work exclusively in Spanish, and the language is always taught through the cultural context of Latin America and more specifically Yucatán. Students learn not only in the classroom but also through constant interactions with other Spanish-speaking environments, fostering cultural enrichment and connection. This course is designed for students with substantial vocabulary, a basic understanding of the subjunctive mood, and basic competence in other intermediate grammatical structures such as simple and compound tenses in the indicative mood.This course intentionally focuses on building student's confidence in spoken communication, using grammatical structures they are already familiar with as well as some that they learn during the course, according to their individual needs. Class activities include debates in groups and pairs; improvisation with spoken word; analysis of audiovisual texts and materials; as well as formal and informal presentations based on a wide range of topics. This course employs diverse resources such music, dance, film, and speeches to encourage a broader vocabulary. Students constantly practice incorporating complex grammatical structures, such as the subjunctive mood, into their speech. By the end of this course, students will be able to express themselves with a higher level of proficiency and in more creative, diverse and natural ways while incorporating more complex grammatical structures with precision. Evaluation will be based on class participation, homework assignments, presentations and progress in effective communication across a wide range

of circumstances.

Level: Advanced. Prerequisite: Permission of instructor. Class limit: 10. Lab fee: $30. Meets the following degree requirements: HS.

MD1022 Working the Sea

For much of the past 5000 years the sea has played a major role in a broad variety of human cultures, histories, arts, and economies. Sea-faring peoples have developed a rich lore and technology that allows them to both survive and even thrive in an often hostile element. This course will mix practical, hands-on learning of aspects of seamanship with a survey of fiction and non-fiction that address maritime themes. During the early part of the term we will concentrate on aspects of small-boat handling, using the College's inflatables, rowing boats, and the larger research vessels, Osprey and Laughing Gull. Students will learn how to launch and land small-craft from docks and beaches, basic rowing skills and use of an outboard motor. They will learn essential knots useful aboard ship and on the dock, how to lay out a course using a chart and compass, use of GPS and depth sounders, basic Rules of the Road, and elements of celestial navigation. During some lab periods we will go on short voyages in the general area of Frenchman Bay. As the term proceeds and weather worsens, we will turn to an increasingly greater literary component, reading accounts of famous voyages and local fishermen, discoveries, battles, legends and poetry. Possible texts include, but are not limited to: Working the Sea by Wendell Seavey, Master and Commander by Patrick O' Brian, Maiden Voyage by Tania Aebi, The Perfect Storm by Sebastian Junger, In the Heart of The Sea by Nathaniel Philbrick, Longitude by Dava Sobel, Slave Ship: A Human History by Marcus Rediker, Kon Tiki by Thor Heyerdahl, We Didn't Mean to Go To Sea by Arthur Ransome as well as excerpts from The Greenlanders' Saga, Moby Dick, The Old Man and the Sea, The Voyage of the Beagle, and Two Years Before the Mast. Students will be evaluated on the basis of class participation, a number of short "quizzes" – which will include practical elements - and a term paper focusing on one aspect of working the sea.

Level: Introductory. Prerequisites: Permission of Instructor. Class limit: 10. Lab Fee $100. Meets the following degree requirements: None.

MD2017 Farming the Wild

Farming has always operated with a degree of tension in relation to wild things and wild places. Agricultural tradition has often embraced the idea of "taming" nature or driving back the wilderness in order to meet human needs. In the 20th Century, an increasingly competitive economy, coupled with rising human populations emphasized massive monocultures that had serious impacts on wildlife and native vegetation. There is no question that conflict can exist between the wild and the curated, however there are also real possibilities for a more harmonic interface between humanized and non-humanized landscapes that can benefit both. In this team- taught course an experienced livestock farmer and a seasoned field ecologist will lead students in exploring the complex and nuanced relationships between managing land for production agriculture and land conservation. By utilizing Peggy Rockefeller Farm (PRF) as its primary case study students will be able to explore the complex histories of land conservation and the current practices of farming on the edge of nature. Students will also explore how farms can enhance native wildlife by providing key habitats and food sources. Students will be expected to learn through course lectures, extensive readings on farming, and wilderness, and practical, hands-on experience on the farm in making domesticated plants and livestock "wild safe". Evaluation will be based on class participation, two short "problem sets" and a comprehensive final exam. Intermediary. Interdisciplinary. Students will be evaluated based on class participation, weekly quizzes, assignments, and a final project and presentation.

Level: Introductory/Intermediate. Prerequisites: ES1054 Biology: Form and Function. Class limit: 11. Lab fee: $50. Meets the following degree requirements: None.

MD2018 Navigation: skills, tools, and the drivers of seafaring

In this course we will explore the origins and evolution of navigation, tracing its development from early Pacific, Mediterranean, and Eastern Atlantic regions to modern global methods. Our focus will center on techniques from the 15th through 19th centuries—a period where innovators and mariners overcame barriers and greatly refined our understanding of the world spatially.

Students will engage in the hands-on construction and use of traditional navigation tools, grounding these practices in the broader context of human migration, exploration, and our understanding of Earth's place in space. We will compare Polynesian, and Eurasian navigation techniques, examining how these cultures applied geometry and the temporal movements of the solar system to traverse the seas.

Topics will include the development of maps and charts, the origins of the universal coordinate system, the evolution of the compass, and the role of geographical knowledge in driving exploration. We will also investigate the challenge of determining

longitude at sea and how modern navigation systems, while simplifying travel, pose new risks for mariners who rely solely on them.

This course is open to all students interested in navigation and is particularly suited for those considering maritime careers.

Students who successfully complete this course will be able to: understand the fundamental principles of navigation; plot courses of travel, fix a position, and perform dead reckoning calculations; appreciate the role of celestial movements and magnetic variations that influence navigation; and use hand tools to craft instruments used in early navigation

Evaluation will be based on problem sets, engagement with course materials, and participation in discussion and collaborative activities in class and lab.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 12. Lab fee: $100. Meets the following degree requirements: None.

MD2019 Paddlesport Instructor and Leadership Course

In this course students will expand their paddling abilities in sea kayaks, canoes, and whitewater kayaks, and use these craft as platforms for outdoor leadership and for helping others become safe, effective paddlers. During classroom sessions, students will be introduced to teaching approaches such as behaviorism and constructivism, and how they can be used to support learning in adventure sport. We will also look at styles of leadership and group management strategies, as well as models of risk management used to manage safety in outdoor sport. On the water, we will apply these ideas while learning to paddle, and while running leadership and instructional sessions for peers. About half of our class time will be spent on the water, in canoes and kayaks; additionally, this course will include a weekend trip later in the term. Certification as an American Canoe Association (ACA) Kayak Instructor, or Community Paddlesports Leader is possible through this course.

Assessment will be based on: students' preparation for classroom and on-water sessions; students' demonstration of various teaching modes to create learning sessions, both in the classroom, and on the water; students' application of leadership models to effectively manage small groups of paddlers in various on-water environments. Final assessment based on classroom and on-water instructional sessions by each student, on a topic of their choosing.

Level: Introductory/Intermediate. Prerequisites: Students must have participated in at least two days of paddlesports instruction. (eg, an OOPS trip, COA pool session, COA whitewater kayak lesson, peer-led sea kayak trip, or similar instruction someplace other than COA). Students taking this class do not need to be skilled paddlers, though they need to have enough experience that they know they'll enjoy spending at least forty hours in a canoe or kayak as part of this course. Class limit: 10. Lab fee: $75. Meets the following degree requirements: None.

MD4014 Building Science and Energy Auditing

Buildings account for nearly 40% of global carbon emissions. Sixty percent of Maine homes are heated with heating oil, the highest percentage of any state, and Mainers spend more than a billion dollars on heating oil each year. Improving the efficiency of our homes and buildings is essential for transitioning away from fossil fuels and reducing carbon emissions.

In this course, students will learn how to safely transition buildings away from fossil fuels. This includes understanding the science of energy and moisture movement through a building, how to monitor carbon monoxide and other harmful combustion gases, and methods to reduce energy loss, while maintaining comfortable levels of humidity and fresh air. Students will gain proficiency measuring air leakage with a blower door, using an infrared camera to assess insulation levels, calculating heat loss, and identifying solutions and best practices to develop a plan of action for homeowners.

They will also learn about high efficiency mechanical systems like air source heat pumps, heat pump water heaters, and how to assess lighting and appliance electrical usage. Students will learn how to carry out cost calculations for energy savings and research and share information on rebates and incentives available for homeowners. This will be a very hands-on course, with weekly labs to teach energy auditing field skills. This course will include presentations from local energy contractors, and students will participate in energy audits of residential buildings on or off campus. Through these experiences, students will meet and interact with home performance businesses and non-profit organizations in the local community. As time and weather conditions permit, students will gain experience implementing efficiency solutions such as insulation and air sealing.

Students who successfully complete this course will be able to conduct energy audits for homes, identify cost-effective improvements, and prioritize energy improvements to maximize energy savings. This course will provide students with the tools

and experience to reduce building energy use and greenhouse gas emissions in a holistic, whole-building approach.

Evaluation will be based on completion of assignments, participation in class discussions, and mastery of field skills.

Level: Intermediate/Advanced. Prerequisites: Physics and Mathematics of Sustainable Energy. Class Limit: 12. Lab fee: $50.
Meets the following degree requirements: None.