

New, Revised and Visiting Course Descriptions FA-23

9/10/2023

AD1026 Introduction to Photography

Kim, June

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

Robbins, Dani

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: None.

AD1068 Introduction to Ceramics; Hand-Built-Pots

Downing , E. Saffronia

Hand-Built-Pots explores potentialities of form and function in contemporary ceramics. Through this intro-level handbuilding course, students will learn ceramic methods such as coil-building, slab construction, and press molding as they consider/create clay pots. Students in this course will take up vessel-making to explore storytelling, personal metaphor, and conceptual practice. Histories of the vessel will provide context for ceramic explorations, as artists such as Magdalene Odondo, Betty Woodman, and Toshiko Takaezu guide our conversations. Assignments include the production of a series of vessel-inspired artworks. Students will be evaluated based on their participation in class discussions and critiques, as well as their inventiveness and demonstrated effort in ceramic assignments.

Level: Introductory. Prerequisites: None. Class limit: 12. Lab fee: \$95. Meets the following degree requirements: ADS

AD1071 Fundamentals of Painting

Sebastian, Neeraj

In this course, students will be introduced to the basic aspects involved in the process of translating what they are observing in space onto two-dimensional surfaces in oil paint. Students will be introduced to the basics of color theory, mixing and matching colors, and also explore how color can change depending on context. Through the assignments we will investigate how form, volume, space and light can be captured in paint. Students will learn how to build their own frames and stretch and prepare canvases for painting and develop a studio practice, which includes cleaning and maintenance of brushes, the palette and other tools. A broad range of ideas and concerns in painting throughout history, from various parts of the world will be introduced in the class. In the last part of the term, different aspects of composition will be discussed: the way colors and shapes can work together to create an integrated image. Assignments will include quick paintings as well as paintings that are made over the course of multiple class sessions. The assignments over the course of the term will build students' confidence in translating what's in front of them, which makes the task of taking on the images in their heads, the images they are interested in, less daunting.

Students will learn how to look at and analyze their peers' work and provide them with constructive feedback during critiques.

Previous drawing experience at high school or college level is strongly recommended. Evaluation will be based on how the specific criteria set for each assignment are met, participation and engagement during critiques, and receptivity to feedback.

Level: Introductory. Prerequisite: None, but previous drawing experience at high school or college level is strongly recommended. Class limit: 12. Lab fee: \$100. Meets the following degree requirements: ADS.

AD2012 3D Studio: Introduction to Three-Dimensional Art and Design

Summers, Kristy

This course is an introduction to three dimensional design and sculpture. Through a variety of projects students will analyze and apply the classic organizing principles of three dimensional design work. Elements of form, space, line, texture, light, color, scale and time (including sound, sensory perceptions, movement and natural processes) will be explored -- with attention paid to how a work functions, involves a viewer, activates a space, or impacts an environment, physically, psychically or socially. Projects in the class will progress from the creation of objects, to investigations of the sensory and objective aspects of space. Students will experiment with subtractive and constructive processes using traditional as well as contemporary materials such as found, recycled and natural objects. A diverse range of materials and techniques will be introduced and demonstrated. Discussion of historic and contemporary artists' work will augment the course. Students will be evaluated based on completion of projects, participation in class discussions and individual/group critiques.

Level: Introductory/Intermediate. Class limit: 15. Lab Fee \$85. Meets the following degree requirements: ADS

AD2042 Ecologies of Cities

Muller, Brook

We typically think of cities as centers of political and economic power, social vibrancy (and tension), and cultural richness, diversity and production. This course explores ecological "readings" of cities, landscapes transformed irrevocably due to human activities and the introduction of unprecedented concentrations of "unnatural" substances and significant loss of biological and hydrological integrity. The course also examines processes by which cities have transformed surrounding regional landscapes as both "wells" of resources and "sinks" for waste and the planetary scale environmental impacts of urban growth in the contemporary global economy. Following a succinct historical survey in the first part of the class (with focus on the interrelated forces of industrialization, colonization and explosive urban growth in the nineteenth century), we will look to recent efforts to reimagine cities such that they are more "ecological." These efforts come in a variety of forms from "city as refugia" (establishing habitat for nonhumans) to "novel ecosystems" (working with new concentrations of contaminants and colonization of non-native biological communities) to cities as settings in which closed-loop, ecologically inspired systems drive processes of development. Of concern related to all of these ecological urbanisms is that conversion of city landscapes from grey to green and blue can lead to ever greater levels of inequality. In the final section of the course, we will speculate as to ways to intervene in cities-as-ecosystems that build on commitments to both social justice and ecological replenishment, bringing into relation the flourishing of humans and nonhumans in urbanized environments. Evaluations will be based on class participation and sustained engagement with the core themes: attendance, demonstration of close readings of texts, contributions to group discussions (including listening), honing of collaborative capabilities, and commitment to an iterative process with the three course projects (the last of which will be worked on in teams) that involve succinct compositions of written narratives and diagrams and other visual representations (multiple graphics workshops will be structured into the class).

Level: Introduction/Intermediate. Prerequisite: None. Class limit: 12. Lab fee: \$25. Meets the following degree requirement: AD.

AD3012 Documentary Video Studio

Shaw, Matthew Patrick

A documentary video or film purports to present factual information about the world. A documentary may take a stand, state an opinion, or advocate a solution to a problem. A documentary may function in the realm of art. Documentaries may compile images from archival sources, interview testimonies about social movements or events, record an ongoing event "as it happens", or synthesize these and other techniques. We will look at various documentaries both historic and contemporary, and a number of strategies and styles, including; video diaries/autobiographical works, cinema verite, propaganda, documentary activism, nature documentaries, and experimental genres. Students will learn the basics of video production, including, using a video camera, video editing, production planning, lighting, microphone use, and interview techniques. Students will make several documentary projects, both collaboratively and individually. Students will be evaluated on their participation in group discussions and critiques, and on the documentary projects they produce.

Level: Intermediate. Prerequisite: any introductory-level arts and design studio course or film history course (previous video production experience is not required). Lab fee: \$40. Class limit: 12. Meets the following degree requirements: ADS

AD3085 Jazz Ensemble

Blotnick, Ryan

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: None.

AD5033 Making Art: Effort, Resilience, Persistence

Downing , E. Saffronia

In this advanced art practicum and seminar, students will pursue the development of a body of art work or series of art works. Through practice, critique, discussion, readings, and interactions with artists and those involved in supporting and presenting artists, students will gain a better understanding of art as an ongoing pursuit, beyond classes and assignments. What does it take to maintain and fertilize the long-term project or a life's work? How can a creative process be carried on, maintained and sustained? The primary goal of this course is for each student to develop their art practice, better understand their creative processes, and show evidence of these developments. This course is an excellent lead-up to a senior project in the arts. Students may work in any medium, but should already have the basic skills required for their chosen project(s)/body of work. This course requires significant dedication outside of class to make artworks. Students are expected to possess and/or extend their ability to be self-directed and motivated. Students will be evaluated on their progress towards their goals, and participation in discussions and critiques; students are encouraged to elect for a credit/no credit grade.

Level: Advanced. Prerequisites: multiple previous art classes and permission of instructor. Class limit: 12. Lab fee: \$80. Meets the following degree requirements: ADS

ED3107 Culturally Sustaining and Revitalizing Education

Tai, Bonnie

This course is designed for students planning to teach in schools whether in Maine or outside of the United States. Culturally sustaining/revitalizing education (CSRE) builds on the aims, values, insights, and practices of anti-racist education, culturally relevant pedagogy, culturally responsive teaching, culturally sustaining/revitalizing pedagogy, decolonizing education, global education, intercultural education, and multicultural education. In particular, it aims to contextualize education in the history of colonization, land theft, slavery, the continued struggle for sovereignty and self-determination of native tribes and First Nations, and calls for wider community accountability. This educational approach challenges deficit mindsets and structures that undergird policies and practices that widen the opportunity gap and equitable access to basic human and civil rights and impede educational access for sustaining and revitalizing cultures that settler colonialism has attempted to eliminate, assimilate, or marginalize. Students will practice asset-based and growth mindsets to gain an understanding of the relationship between CSRE and respect for tribal sovereignty and support of contemporary struggles for tribal continuity and resistance to cultural genocide and epistemicide. The course also opens a dialogue on the applicability of CRSE for immigrant, refugee, and asylum-seeking students whose relationship to their new place of residence may be tenuous at best and whose heritage languages and cultures are also endangered as a result of first- to second-generation assimilation in their adopted communities. Students will gain an understanding of conceptual frameworks, knowledge of empirical studies documenting outcomes and impacts of these approaches, and skills in ethically and effectively teaching indigenous, immigrant, and other culturally and linguistically diverse learners. For students seeking Maine teaching endorsements, this course will prepare them to implement LD291 requiring Maine educators to teach Wabanaki history and culture. Students will learn through field trips, guest speakers, films, discussions, critical exploration and reflection, independent research, observation/fieldwork/practicum, and peer teaching. Evaluation will include artifacts to be incorporated into a teaching portfolio: a lesson plan, teaching video, self-assessment, assessment of PK-12 student work, and communication with families and community members. Although there are no prerequisites, the following are recommended; Learning and/or proficiency in a language other than English; a psychology, sociology, or anthropology course; and/or a prior education course.

Level: Intermediate. Prerequisite: None. Class limit: 15. Lab fee: \$25. Meets the following degree requirements: ED, HS.

ES1018 Physics I: Mechanics and Energy

Altair Ferreira, Thiago

This course is the first of a two course sequence covering a range of standard introductory physics topics. The goals of the course are: to introduce students to important physical ideas both conceptually and mathematically; and to help students improve their quantitative skills. The first part of the course consists of a broad look at the three conservation laws: the conservation of momentum, energy, and angular momentum. Along the way, we'll learn about vectors, work, potential energy, thermal energy,

and the energy stored in chemical bonds. We'll conclude with a treatment of Newton's laws of motion. If time permits, we may briefly cover some topics from chaotic dynamics. Evaluations will be based on participation in class and lab, weekly homework, and two untimed, open-notes exams. This course makes extensive use of algebra and trigonometry. Potentially difficult math topics will be reviewed as necessary. Prerequisites: Understanding Functions, a strong high school algebra background, or consent of the instructor.

Level: Introductory. Class limit: 20. Lab fee: \$40. Meets the following degree requirements: ES QR

ES1038 Geology of Mt. Desert Island

Braddock, Scott

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: 16. Lab Fee: \$100. Meets the following degree requirements: ES

ES1086 Introduction to Field Sampling: Collection to Data Points

Hudson, Reuben

In this course, students will learn how to ask relevant field science questions, how to collect samples in the field (soil, water, air, plant, plankton, sediment), and how to process the samples in the lab (sieving, counting, digesting, extracting), how to turn those samples into data points, and how to communicate the findings. When technical field skills are necessary for sample collection, we will offer co-curricular instruction (knot tying, canoeing for lake sediment coring, kayaking for water sampling, etc). This course will cover microplastic analysis in water and soils, water chemistry (ions, pH, organic pollutants), and charcoal analysis in sediments. Students will be evaluated based on participation in field sampling, lab processing, and lecture discussions, as well as through regular problem sets and a term-long writing project. Students will need waterproof shoes, sturdy hiking boots, raingear (rain pants and raincoat) and appropriate layers (synthetic or wool) for spending prolonged periods of time outside. If students do not have their own personal gear we can provide it for them if we are informed by the start of the course. All technical equipment (canoes, lifejackets, coring equipment) will be provided.

This course is not permission of instructor, but it is linked to a pre-matriculation summer STEM program. All seats will be reserved for first year students. As was done last year, admitted students will be invited to join the pre-matriculation summer STEM program. Students who join the summer STEM program (this will happen prior to registration) will be given priority to join the class. If there are open seats not taken by students doing the summer STEM program, then these seats can be made available to other incoming first year students when they register.

Level: Introductory. Prerequisites: None. Class limit: 10. Lab fee: \$0. Meets the following degree requirements: ES, QR.

ES5047 Plant Systematics

Letcher, Susan

Systematics is the scientific study of classification, specifically the placement of organisms into groups based on their common descent. This course focuses on the classification of land plants, with a particular focus on herbaceous taxa found in coastal Maine. Through lectures and field, lab, and herbarium work, we will gain familiarity with the practice of systematics and the characteristics of plants that are used to infer their phylogenetic relationships. Lectures will cover the theory and practice of systematics, including botanical nomenclature, plant identification terminology, relationships among the major plant groups and characters with taxonomic significance, herbarium specimen preparation, and bioinformatics. Labs will cover collection methods, specimen preparation, and field characters for about 30 plant families in the region. Evaluation will be based on participation, field and lab quizzes, a 5-minute oral presentation on a plant species chosen by the instructor and a 15-minute oral presentation on a topic in plant systematics chosen by the student, and a collection of at least 30 plant specimens from at least 20 different families prepared and identified by the student. Students should plan to begin collecting specimens over the summer in preparation for the course, following guidance that will be provided to registered students during the spring term. Please note: all collecting must be done in accordance with state and federal laws; there must be NO collecting in Acadia National Park and no importation of specimens from outside the US.

Level: Advanced. Prerequisite: Biology Form & Function and Trees and Shrubs of MDI or equivalent knowledge of local flora. Class limit: 15. Lab fee: \$40. Meets the following degree requirements: ES.

HS1094 Public Speaking Workshop

Rand, Kendra

Consider all the ways that public speaking could be a part of your academic and professional paths: presenting your research, sitting on a webinar panel, speaking up at ACM, advocating for an urgent cause or policy, preparing your senior project presentation, delivering a formal address at a special occasion, or even deciding to perform spoken word at an open-mic. This course will prepare you to thoughtfully analyze your audience, research and organize relevant information, and deliver the critically important, well-prepared presentation that you're capable of. Along the way we will be guided by, and critically analyze, three varied and sometimes contradictory premises: that it's imperative to master the art of formal, standard presentation/speech delivery, that it's equally important to respect and refine your own unique, authentic voice and speech communication style, and that important change happens when we both listen carefully and speak up loudly. This class will be conducted as a workshop with an emphasis on students producing increasingly advanced speeches for public performance and/or consumption. Students will complete three graded, "formal" presentations while also considering additional creative approaches and formats for public communication. Students will work with a variety of short texts and videos to generate new ideas and helpful public speaking habits. The real benefits of this course come from the positive, supportive, environment in which students can practice new public speaking skills and learn from each other. This class emphasizes a fun, dynamic, "hands-on" approach to constructing speeches. Students who feel that they are less proficient in the area of public communication should not be worried that this would somehow disadvantage them in terms of their overall evaluation. All students, regardless of their levels of comfort, experience, or and English-proficiency are encouraged to consider this course. This workshop is designed to help you improve your public presentation skills regardless of whether you are a complete novice to public speaking, or already have many years of practice. Your final evaluation for the course will be based on your engagement with the process, not on some objective standard of who gave the best speeches.

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

HS1109 Genre Explorations

Khor, Su Yin

As someone who writes every day, you have probably noticed that it's more common to text LOL to a friend, as opposed to writing "LOL things were busy" when emailing to ask a professor for an extension on a paper. Similarly, you probably expect this course description to include certain information about the course rather than tips for becoming a viral sensation on TikTok. Why do these differences exist? What is the point of knowing the differences? And how is this relevant to writing?

In this course, you will explore different kinds of writing (genres) to understand how the context shapes the way we write. The explorations of various everyday, academic, and professional genres will help refine the rhetorical skills that you already have and develop your awareness of how writing is used in different contexts. The goal is to build your knowledge of writing and make your repertoire of languages and literacies visible so you can transfer these skills and write in other courses and non-academic settings.

The class activities will provide you with many hands-on opportunities to explore and analyze writing in a collaborative setting with your peers in small and large group activities. You will complete inquiry-based projects to examine different genres and reflect on your evolving understanding of writing. Your learning will be evaluated based on these assignments and activities. By the end of the course, you will have developed the language to talk about writing and built the skills, agency, and confidence to engage in different kinds of writing activities in academia and beyond.

Level: Introductory. Class Limit: 16. Lab Fee: None. Prerequisites: None. Meets the following degree requirements: W.

HS2063 Hate Crimes in the Contemporary US and Europe

Wessler, Stephen L

Students will learn what causes bias motivated violence in schools and communities, how to develop effective prevention strategies, how to reduce police violence toward traditionally targeted groups, and why hate crimes have such destructive impacts on individuals and communities. The course will focus on hate crimes and police and community response in the US and in Europe. The students will examine their own ethnic, racial, gender, sexual orientation and religious identities as victims and/or perpetrators of bias and violence. The course will examine bias and violence in Europe toward traditionally targeted groups such as LGBTQ, Muslim, Jewish, migrant and Roma people. Finally, the course will examine approaches to reducing bias motivated violence by police toward groups such as blacks, Muslims and Roma. Students will be evaluated based on short written responses to readings, in-class discussion, two papers and a final project. The final project will explore some aspect of bias motivated violence through persuasive writing, fiction, poetry, art, photography/film, advocacy or interviews. Course readings will include scholarly writing, reports from human rights NGOs, first person accounts and one novel. Class sessions will involve discussions led by me and at times by students, small group discussions between students and occasional guest presenters. The class will travel to Portland or Lewiston to meet with refugees from places in which bias motivated violence has been significant.

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

HS2098 Introduction to Philosophy of Mind

Jacoby, Franklin R

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: None.

HS2117 Gandhian Economics and Green Entrepreneurship

Oruganti, Ramasubramanian

In critically examining existing global economic models, we will use case studies from India that draw on the lens of Gandhian Economics and ways to remake society through green entrepreneurship. We will focus on ideas that bring ethics to the forefront of the enterprise creation process, drawing, especially, on ideas of J. C. Kumarappa. We will look closely at ways in past societies, cultural ethos guided enterprise and how there is a need to re-create / revive these to ensure sustainability. Extensive examples will be provided from my own research work on the rural local institutions that manage large enterprises in India. These will be compared as well with the successes and challenges, in Gandhi's time, of the village industries movement for which Kumarappa was the chief architect. We will explore the successes as well as challenges in examples of how green entrepreneurship is manifesting within the market paradigm of today in contemporary India. The initial 2 weeks of class will be in person and then online sessions will be used to allow for engaging with entrepreneurs on the ground in India. Assignments for the course will include short reflective writings and a term project. Criteria for evaluation will be based on the extent to which student writing and class participation demonstrate close familiarity with the readings and a thoughtful, collaborative, critical engagement with the ideas developed in the course.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 15. Lab fee: \$25. Meets the following degree requirements: None.

HS2119 Global Politics of Climate Change

Stabinsky, Doreen

Two international treaties, the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, are the legal architecture for global cooperation to address climate change. The national governments that are signatories to the treaties gather yearly at the Conference of the Parties (COP) to negotiate the implementation of the agreements. A large number of non-governmental actors also attend the meetings, including many from civil society and social movements who are there to pressure governments to act with the speed and scale necessary to address the growing climate crisis. This course is an introduction to both these treaties and the global politics surrounding their implementation. In the course, students will gain strong foundational historical, legal, and political knowledge of both of the treaties and the intergovernmental processes of treaty implementation. Through a focus on politically contested issues within the negotiations, students will be introduced to a range of the civil society organizations and social movements that engage in the global politics of climate change, and their politics, strategies, and tactics. Course material will include primary documents from negotiations, civil society documents, and conversations with key actors. Evaluation in the class will be based on class participation, several problem sets, and a final individual or group project.

Level: Introductory/Intermediate. Prerequisites: None. Class limit: 20. Lab fee: None. Meets the following degree requirements: HS.

HS3121 Current Trends in AI: Problems and Projects

Cox, Gray

This course explores the nature of current developments in artificial intelligence and how they present challenges and opportunities in ways they are transforming the world. We will adopt a broad definition of AI that includes everything from

simple thermostats to the most advanced machine learning systems and we will look at ways these are altering life processes in the natural world and institutions throughout society.

Course goals are: 1.) to advance understandings of different programming principles, research and development strategies and underlying philosophical assumptions guiding development in such technologies; 2.) to develop abilities to use interdisciplinary, problem centered approaches to understand the distinctions between complicated and wicked problems associated with rapid technological change in this area and key approaches to dealing with them; 2.) to cultivate skills in working collaboratively on problem-centered studies as well as programming projects that deal with AI in areas of student interest, 4.) to develop meta-cognitive abilities to learn these kinds of material in groups as well as on your own.

A major part of the course for each student will be a term project which can be pursued either individually or collaboratively. It may take a variety of forms including, for instance: 1.) a futures studies investigation using methods of historical and/or social science research culminating in a report on some emerging, AI-related social or environmental concern; 2.) a computer programming project that solves a practical problem, is conducive to artistic expression, performs scientific analysis of quantitative data, or demonstrates an established or experimental feature of an ML or otherwise AI system; 3.) a philosophical and/or theoretical critical analysis of underlying concepts, values or assumptions that are at stake in the emerging AI technologies.

Readings will include some classic texts in AI theory, philosophy, and futures studies as well as selections from standard texts on AI programming. We will also use podcasts, films, and other media to pursue key topics and trends. There will be a series of short programming activities to study basic principles and try modeling aspects of more complicated and/or complex systems. These will be done, at least initially, in block coding which will be accessible to students without any previous programming experience and which allows people to see how this translates into other languages such as C or Python. We will examine the ways in which they can be coded in Python and students familiar with that or other languages will be able to pursue homework and final project work in whatever language they may prefer. We will also explore methods of prompt engineering for working with emerging systems that have dialogical interfaces.

The course will include two weekly class sessions as well as a lab. Class sessions will vary in format from extended discussion of texts and problems to supplementary lecture, visiting speaker, collaborative coding activities and extended project work. The class as a group will develop at least one major hackathon style project as a way of exploring key issues and developing key skills.

Evaluation will be based on the extent to which students demonstrate in homework, class participation and individual projects that they have advanced in each of the four main goals for the course.

This class will be especially well suited for students who want to continue computer assisted research, art work, coding or other projects they previously explored in other classes.

Level: Intermediate. Prerequisites: None. Class limit: 15. Lab fee: \$35. Meets the following degree requirements: HS.

HS3122 Navigating Change: History, Place, Stories

Little-Siebold, Todd

This three-credit interdisciplinary course will explore how coastal communities, especially around Frenchman Bay, have navigated and are navigating major changes in their communities, the Bay, and the ecology around them. This place-based course will use the Bay and surrounding towns to explore how history, geography, audio storytelling, and data science can illuminate, document and nurture community perspectives on their past, present and future. Students will undertake research projects focused on communities and their stories of adaptation and community members' reflections on the dramatic changes they have witnessed in the last decades both onshore and at sea. The class will provide opportunities to learn about and use skills from data analysis and visualization, oral history and audio story-telling as well as community-based research rooted in both history and geography. This interdisciplinary approach will allow the class to grapple with how projects can be used to help facilitate community conversations about how their inhabitants have used different strategies to adapt in the past and present in ways that could inform their future. The course will involve field trips, overnight stays, and community work throughout the region, and the monster course format provides extended periods of time on the projects they undertake. The course will include time on the water and in communities, and students should expect to spend substantial time on and off campus for the class. Students will be evaluated on short assignments, team projects, and overall level of effort on coursework. This course is appropriate for students from a wide range of backgrounds and both academic and personal experiences, and there are no prerequisites. Given the immersive approach of the class the instructors would encourage students to reach out to the instructors prior to the class.

Level: Intermediate. Prerequisite: None. Class limit: 10. Lab fee: None. Meets the following degree requirements: HS, HY, QR.

MD1033 Organic Poultry Practicum

Nugent, April

This course will introduce students to the basics of organic poultry management. The course will focus on raising poultry for meat production with some attention to egg production. All classes will be taught at Peggy Rockefeller Farm (PRF) or other local farms. Students will have the chance to work with chickens and turkeys at PRF. The course will meet once a week for three hours. In each class we will discuss an article about poultry husbandry and work hands-on with the flocks. Students will learn about the anatomy and physiology of poultry and the distinct features of raising meat versus egg breeds. We will cover poultry nutritional needs, common diseases that affect flocks (e.g., bird flu), and learn how to keep flock records and budgets. Week one of the course, students will begin caring for newly hatched chicks. Throughout the term students will learn how to care for their flock of birds by participating in daily poultry chores (feeding and watering), rotational grazing, and monitoring for disease. For the final project students will participate in the slaughter and packaging of the meat birds and determine how they want to market and distribute them. Options could include hosting a pop-up market, donating them to a local food access organization, helping prepare them for COA's dining hall, or something else. Students will be evaluated based on class participation (participation in discussions, activities, and field trips; feeding and caring for the flock), a reflection paper, and the final project.

Level: Introductory. Prerequisites: None. Class limit: 8. Lab fee: \$40. Meets the following degree requirements: None.

MD3017 Human Ecology Lab in Ōsakikamijima

Friedlander, Jay

This course will be an interdisciplinary exploration of the relationship between the place and people of Osakikamijima island in Hiroshima prefecture, Japan. With a rich maritime heritage, local farms, traditional culture, and tight knit community this Japanese island has many parallels with Mount Desert Island. In addition, Osakikamijima's aging population, depopulation, and isolation, also mimics the opportunities and challenges faced by much of Japan.

The class begins in Hiroshima, where students will explore the tragic modern history of Hiroshima, as well as the 1500-year-old Miyajima shrine, a UNESCO World Heritage Site. Once on Osakikamijima, we place local knowledge and experiences at the center of the course with students immersing themselves in activities to spark their curiosity in Japanese island life and the natural environment. Students will engage with Japanese culture and language by interacting with island residents. To support their connection to community members, students will study beginner-level Japanese throughout their time on Osakikamijima. These ties will be reinforced with local travel and explorations as well as community members participating as workshop instructors and classroom guest speakers. To build familiarity with the island and the intersection of the natural and human worlds, students will conduct terrestrial and aquatic microplastics research. Further interaction between students and the community will be promoted with weeklong "micro-internships" at a variety of food systems and other enterprises working in harmony with the natural environment. At the conclusion of the program, students will give short presentations to the community showing what has made the strongest impression on them during their time here, and how it could be used to draw in the people to help Osakikamijima survive.

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; a video montage; verbal presentations; reflection papers; and a final project presentation to the community.

Level: Intermediate. Prerequisites: None. Class limit: 10. Lab fee: \$1200. Meets the following prerequisites: None.