

Hampshire College

Spring 2020 Course Descriptions

CS-0140-1 **Philosophy of Language**

Professor: Daniel Altshuler

The goal of this new course is two-fold: (a) considering, competing theories of what names ("Venus") and definite, descriptions ("the morning star") mean (looking at classic, work by Frege, Russell, Donnellan and Kripke); (b), considering the way that truth and context relate to, performativity (Austin), convention (Strawson, Lewis), and, indexicality (Kaplan). No prior courses in philosophy, required. Taking this course will enable the student to, learn philosophical methodology, philosophical writing and, reading, and prepare one to take further courses in, philosophy, logic, linguistic semantics and other courses, related to language in the cognitive sciences and across the, humanities.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: FPH 108

CS-0177-1 **Aliens: Close Encounters**

Professor: Salman Hameed

This course can be summed up as: everything you wanted to, know about aliens but were afraid to ask (a scientist). The, course will explore the topic of extraterrestrial, intelligence from the perspective of several different, fields. We will look at the history of UFO sighting claims, and analyze the reliability of eye-witness testimonies,, explore psychological & sociological reasons behind claims, of alien abductions, and analyze the current state of the, search for extraterrestrial intelligence (SETI) from the, perspective of astronomy and planetary research. We will, also examine how film and television have shaped our view of, aliens in popular culture. We will conclude the course by, looking at religions that have been inspired by UFOs and, extraterrestrials.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: TTH 09:00AM-10:20AM

Location: ASH 221

CS-0185-1 **Teaching About Nature in Natur**

Professor: Timothy Zimmerman

Are you interested in teaching summer camp outdoors?, Teaching nature classes in outdoor settings?

Becoming an environmental educator? This course will teach you a variety of skills, knowledge, and instructional techniques. This course includes a "lab" session where you will: observe, expert outdoor environmental educators, design one, class/activity, and practice teaching. Lab sessions will be held at The Hitchcock Center for the Environment located on Hampshire's campus near the farm. Students must be willing/able to spend time teaching and learning outdoors. In addition to the practical components of this course, we will read and discuss academic writing on the topics of, group management, instructional practice such as free-play, and guided discovery, general learning theory, and how to, design for learning. Prior coursework/knowledge of education, and/or ecology is helpful but not required.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM W 02:30PM-05:20PM

Location: EDH 5, ASH 5

CS-0191-1 Animation Fundamentals

Professor: Bassam Kurdali

This course will cover beginning and intermediate topics, related to the creation of two and three-dimensional, animations on the computer. Lectures, readings and homework, assignments will explore subjects related to digitally drawn, animation, 3D character animation using supplied rigs, basic, modeling, shading and rendering, and combining 2D and 3D, elements together. Students will be expected to complete, individual projects using 2D or 3D animation techniques, or, both, based on their own choice, and to participate in group, exercises that explore animation as a medium, and both, develop/strengthen knowledge of the basic ideas in animation, and interrogate them.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: MW 02:30PM-03:50PM

Location: ASH 126

CS-0205-1 Social Development

Professor: Melissa Burch

Social relationships and social understanding are important, parts of our lives from infancy onward. In this course, we will explore the developmental significance of parent-child, and peer relationships from infancy into childhood and, adolescence. We will also discuss children's understanding, of theory of mind, gender, emotions, and self. In, particular, we will focus on age-related changes in these, skills and how they impact social relationships. We will, also consider cross-cultural difference in patterns of, social behavior. Evaluation will be based on participation,, a series of short papers, and a longer final project., Students will read research articles and be responsible for, class presentations.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: ASH 221

CS-0234-1 **Semantics**

Professor: Daniel Altshuler

This course is an introduction to a scientific approach to, meaning called semantics. We will focus on composition: the, idea that the meaning of a whole is composite of the, meanings of its parts. In addition, we will focus on truth:, the idea that we understand the meaning of a sentence by, understanding what the world would have to be like for the, sentence in question to be true. Finally, we will focus on, context and ambiguity: the idea that in order to evaluate a, sentence for truth, we must assess the surrounding discourse, in which that sentence occurs; depending on that discourse,, a given sentence may mean different things. To make these, phenomena precise, the semantic theory that we develop, employs tools from syntactic theory, set theory and logic., It allows us to analyze the meanings of words and sentences., This course develops quantitative and research skills, necessary for doing more advanced work in linguistics,, philosophy and logic.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: T 06:00PM-08:50PM

Location: FPH 108

CS-0235-1 **Visual Storytelling**

Professor: Jennifer Gutterman

This course explores visual narrative over sequences of, images as used in time-based media, interactive media, and, graphic novels. Students will become familiar with the, disciplines that use sequential art, as well as the tools, necessary for composition, panel design, and visual, translation of written scripts. We will study time-based, media in both linear and nonlinear modes, as well as, composition and the visual arc of panels on physical pages, and screens. Students will work through a professional, workflow that includes initial concept, thumbnail, development, visual milestones particular to the intended, output, peer critique, revision, and successful completion.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: YES

Time: MW 05:30PM-06:50PM

Location: ASH 126

CS-0247-1 **Darwin in the Muslim World**

Professor: Salman Hameed

This course will look at the way Darwin's theory of, biological evolution was received in the Muslim

world in the, late 19th and early 20th centuries and how these debates, have played out to contemporary times. We will encounter, early defenders of Darwin's ideas like Sayyid Ahmad Khan in, British India and the Grand Mufti of Egypt, Muhammad Abduh,, as well as critics such as the proponent of pan-Islamism,, Jamal al-din Afghani. We will also look at the way culture, and politics today shape the debate over the acceptance and, rejection of biological evolution in Turkey, Pakistan, and, for Muslim minorities in Europe and the United States.

Instructor Permission: NO Satisfies Distribution: MBI This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: ASH 222

CS-0253-1 **Interactive Fiction**

Professor: Ira Fay

Through the lens of interactive fiction, students will, improve their creative writing and digital game development, skills by working as a member of a small, interdisciplinary, team. As a prerequisite, students must have expertise in, creative writing and/or game design. No programming, experience is required, though some light programming will, be included in the course. Students will pitch ideas for, games and will work on games of their choice. To obtain, instructor permission and more information, see, irafay.com/classes. Students will be encouraged to develop, games using Twine or other appropriate interactive fiction, tools, and will ideally make their games available for free., All assets and code generated in the class will be released, to the public domain. To facilitate group work, there is a, reserved lab time from 10:30am - 1pm on Fridays.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 10:30AM-11:50AM F 10:30AM-01:00PM

Location: FPH 101, FPH 101

CS-0257-1 **Critical Place-Based Education**

Professor: Timothy Zimmerman

In this advanced-level course on environmental education, we, will read seminal works on notions of place (Thoreau,, Leopold), critical pedagogy (Freire), place-based education, (Sobel), critical theory (hooks), and ecophilosophy. We will, also read modern thinkers such as Gruenwald/Greenwood,, Berry, Gough, and non-white, indigenous and gender diverse, scholars LaDuke, Taylor, Hoffner and others. We will spend, time in "places" (possibly including a field trip, or two), to investigate our own notions and perceptions thereof to, connect the theory and practice. Students in this class will, also participate in a whole-class, semester-long activity., Journaling, class discussion, class project participation,, and writing a final paper will serve as forms of evaluation, for this class. Note: this is an advanced level course, intended for Div II (2nd or 3rd year) and Div III (4th year), students.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TTH 02:30PM-03:50PM

Location: RWK 108

CS-0266-1 Computer Animation II

Professor: Bassam Kurdali

This course will cover intermediate topics that pertain to, the production of visual imagery with the tools of, three-dimensional computer graphics (CG). Lectures,, readings, and homework assignments will explore subjects, including organic shape modeling, character articulation,, character animation, extensions to the basic shading and, lighting models, as well as procedural and computational, animation. Students will be expected to complete individual, projects and participate in group exercises that explore CG, as both a standalone medium and as an integral part of, modern film/video production.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 01:00PM-02:20PM

Location: ASH 126

CS-0289-1 Practicum in Peer Mentoring

Professor: Laura Wenk, Robin Nolasco

This course will prepare students to be peer mentors in the, Knowledge Commons in the library. We will meet weekly as a, group to discuss some readings, make decisions about Commons, staffing, hone our practice and debrief from our, experiences. The bulk of the course and its assignments take, place through work as peer mentors in the Knowledge Commons, space and/or in the media labs as appropriate. Each student, will select to work in one of these areas: Research and, Technology, Holistic Learning Program, the Community, Commons, Quantitative Resource Center, the Media Labs, or, more generally in academic programming (e.g. supporting a, college-wide program, organizing skill shares or writing, jams, etc.). Students will develop an understanding of what, it means to be in a mentoring role and hone their practice., In addition to functioning as Peer Mentors during this, semester, there will be opportunities for continued work as, a Peer Mentor in future semesters. Students should expect to, work approximately 10 hours outside of class on readings,, assignments, and work in the Knowledge Commons.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: F 01:00PM-02:20PM

Location: LIB B9

CS-0295-1 Curriculum Design

Professor: Laura Wenk

Where does good curriculum design come from? What is the relationship between curriculum and pedagogy? How do good educators promote deep learning despite the current, political climate that emphasizes content mastery and, efficient instruction? Should curriculum and instruction, differ between school and non-school contexts? In this, course, you will learn research-based curriculum design, practices, how to focus on conceptual understanding and the, development of higher order thinking in a number of domains, (e.g. critical thinking, integrative thinking, innovative, thinking) and across multiple contexts. Each student or, group develops a curriculum unit on a topic of their choice., In addition, students get some practice teaching their, materials to one another. This course is designed for, Division II and III students who are interested in teaching, in formal or non-formal settings or who are developing, curriculum as part of their independent work.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 02:30PM-03:50PM

Location: FPH 108

CS-0297-1 Analog Game Design

Professor: Ira Fay

In this course, students will play, analyze, and design many, non-digital games to deepen their understanding of game, design. We will make good use of the Hampshire Game Library!, Assignments will be project-based and are intended to, provide both crucial practice of skills and useful additions, to a portfolio. Student interest will determine the specific, games to be studied, but could include D&D miniatures,, Magic: the Gathering, Star Wars: Destiny, and a large, variety of strategy board and card games, etc. Frequent, critiques and playtests will increase students' ability to, give and receive thoughtful feedback. To facilitate the, substantial game playing and analysis that, will be required outside of class hours, there is a reserved, lab time from 1 pm - 3:50 pm on Fridays.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 01:00PM-02:20PM F 01:00PM-03:50PM

Location: FPH 103, FPH 103

CS-0299-1 Special Education & Inclusion

Professor: Gwen Bass

Schools operate on the idea that learners are "regular" or, "special needs." This course examines these ideas, exploring, topics related to a variety of learning differences, including ADD and autism, as well as factors that influence, a child's readiness to learn. With an emphasis on inclusion, in schools, students will discuss the impact of current, policies, laws, assessments, and practices on students who, learn

"typically" and on those who learn "differently.", Students will consider adaptations to the learning, environment, classroom structure, and approach to teaching, that enable all children, regardless of their learning, strengths and needs, to reach their potential and achieve, meaningful goals.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: M 06:00PM-08:50PM

Location: ASH 222

CS-0304-1 **Cetacean Communication**

Professor: Laela Sayigh

The diverse and seemingly complex vocalizations of whales, and dolphins (cetaceans) have long fascinated people and, have led to suggestions of "language"-like communication. We, will take a "deep dive" into what is actually known (and not, known) about cetacean communication in this course, through, readings and discussions of current scientific literature., We will also do hands-on analyses of existing bioacoustic, data sets, recorded from a variety of cetacean species, such, as blue whales, pilot whales, and several dolphin species., Students will be expected to actively participate in and, lead some class discussions. Each student or team of, students will choose one aspect of data analysis on which to, focus, and will develop that analysis into a research, project that will include a final paper in publishable, format. In addition, each student or team will present their, work to the entire class.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: T 06:00PM-08:50PM

Location: ASH 126

CS-0318-1 **3D Character Modeling**

Professor: Jennifer Gutterman

In this course, students will further develop their 3D, modeling skills, with a focus on character modeling for, games and animation. Students are expected to have some, experience related to 3D modeling prior to taking this, course. The course work will include practical examples and, project-based work, ideally providing useful material for, student portfolios. Models will generally be high poly, and, if time allows, techniques related to 3D printing will also, be explored. By the end of the course, successful students, will be able to model characters that can reasonably be used, in games and animation.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 04:00PM-05:20PM

Location: ASH 126

CS-0347-1 **Darwin in the Muslim World**

Professor: Salman Hameed

This course will look at the way Darwin's theory of biological evolution was received in the Muslim world in the late 19th and early 20th centuries and how these debates, have played out to contemporary times. We will encounter, early defenders of Darwin's ideas like Sayyid Ahmad Khan in, British India and the Grand Mufti of Egypt, Muhammad Abduh,, as well as critics such as the proponent of pan-Islamism,, Jamal al-din Afghani. We will also look at the way culture, and politics today shape the debate over the acceptance and, rejection of biological evolution in Turkey, Pakistan, and, for Muslim minorities in Europe and the United States.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: ASH 222

CS-0389-1 Practicum in Peer Mentoring

Professor: Laura Wenk, Robin Nolasco

This course will prepare students to be peer mentors in the, Knowledge Commons in the library. We will meet weekly as a, group to discuss some readings, make decisions about Commons, staffing, hone our practice and debrief from our, experiences. The bulk of the course and its assignments take, place through work as peer mentors in the Knowledge Commons, space and/or in the media labs as appropriate. Each student, will select to work in one of these areas: Research and, Technology, Holistic Learning Program, the Community, Commons, Quantitative Resource Center, the Media Labs, or, more generally in academic programming (e.g. supporting a, college-wide program, organizing skill shares or writing, jams, etc.). Students will develop an understanding of what, it means to be in a mentoring role and hone their practice., In addition to functioning as Peer Mentors during this, semester, there will be opportunities for continued work as, a Peer Mentor in future semesters. Students should expect to, work approximately 10 hours outside of class on readings,, assignments, and work in the Knowledge Commons.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: F 01:00PM-02:20PM

Location: LIB B9

CSI-0166-1 Liberalism and its Critics

Professor: George Fourlas

In this course, you will become familiar with key figures, and arguments in contemporary social-political philosophy., We will focus on the tradition of liberal social contract, theory, which first emerged in the 17th century and, continues to inform political thought. We begin with an, introduction to the major

theoretical and cultural origins, of contract theory: Thomas Hobbes's Leviathan and John, Locke's Two Treatises of Government. Through these texts and, others, you will be prepared to discuss a wide range of, foundational issues in political philosophy: legitimacy,, authority, law, rights, equality, liberty, property,, citizenship, and justice. Given that liberalism has been the, central tradition in political thought since its emergence, and imposition, there is an equally important tradition of, dissent that we will address. Common to the various critical, theories we will address is the illumination of, contradictions within liberalism, such that despite liberal, values of democracy, equality, and liberty, there continue, to be flagrant cases of tyranny and terror sanctioned by, liberal nations. The victims of these tyrannies include, women, indigenous peoples, racial/ethnic and religious, minorities, the working class/poor, and many Others. As we, analyze these critical accounts, we will also consider how, we can move past the failures of liberalism to form a more, peaceful and just society.

Instructor Permission: NO Satisfies Distribution: CHL, PCSJ This course has a Prerequisite: NO

Time: MW 10:30AM-11:50AM

Location: FPH 108

CSI-0173-1 **Sex & Science**

Professor: Pamela Stone, Lise Sanders

How did Victorians conceive of the body? In a culture, associated in the popular imagination with modesty and, propriety, even prudishness, discussions of sexuality and, physicality flourished. This course explores both fictional, and non-fictional texts from nineteenth-century Britain in, conjunction with modern scientific and critical, perspectives. We will discuss debates over corsetry and, tight-lacing, dress reform, prostitution, and the Contagious, Diseases Acts, sexology, hysteria, and other topics relating, to science and the body, alongside novels, poetry, and prose, by major Victorian writers. The writings of Freud, Foucault,, and other theorists, as well as writings in the natural and, biological sciences, will assist us in contextualizing, nineteenth-century discourses of gender, sexuality, race,, and embodiment. Several shorter papers and a longer research, project will be required.

Instructor Permission: NO Satisfies Distribution: CHL, MBI This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: FPH 108

CSI-0185-1 **Sun, Sand, Sex, Safari...**

Professor: Rachel Engmann

Lions and Maasai, elephants and Bushmen, camels and Tuareg -, Africa is seen as the continent of colorful cultures,, picturesque people and thatched huts. This course, introduces students to some of the key themes and debates in, the anthropology of tourism, exploring the commodification, of culture and nature in Africa as objects with marketable, value. In this class, we ask: What is a tourist? How do,

hosts feel about tourists? Why do people travel for leisure, to Africa? Does tourism help or hinder African development?, What does the study of travel and tourism in Africa tell us, about the world in which we live? Engaging with, ethnographies, our approach will explore the various forms, of tourism: safaris, adventure tourism, eco-tourism, dark, tourism, slum tourism, roots tourism or pilgrimage,, volunteerism and study abroad, romance and sex tourism,, medical tourism and touring poverty.

Instructor Permission: NO Satisfies Distribution: ADM, CHL, PCSJ This course has a Prerequisite: NO

Time: MW 09:00AM-10:20AM

Location: FPH 104

CSI-0229-1 **Zapatistas**

Professor: Margaret Cerullo

In 1994, to everyone's astonishment, the Zapatistas rose in, revolt in Chiapas, Mexico, the same day that NAFTA went into, effect-January 1, 1994. How to make sense of the, coincidence? Why have so many, in Latin America and in the, world, found the Zapatista messages exciting? What, challenges face the Zapatistas today, including the election, of a "progressive" government in Mexico in 2018? , , The Zapatistas' actions and writings constitute a case study, in which the economic, the political, indigenous rights,, women's rights, civil society, cultural memory, and writing, that is poetic and political--all converge. Focusing on the, Zapatistas, we consider an example of "local" resistance to, "global" designs. "Resistance" names the struggle in Latin, America against the precariousness of life under neoliberal, economics, and against dominant paradigms that relegate, other forms of knowledge and doing to the realm of "the, primitive" or the invisible. Together, the two constitute, renewed efforts to decolonize Latin America, economically, and culturally.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: W 02:30PM-05:20PM

Location: FPH 106

CSI-0231-1 **Queer Fem Sci. Studies**

Professor: Angela Willey

This course will introduce and explore themes in Queer, Feminist Science Studies. Among the central questions of, this class are: What is queer feminism? What is science, studies? How is the study of science important to queer, feminist critical and worlding work? How do we understand, the boundaries between critiquing and practicing science?, What does it mean to read queer / feminist theory as a site, of knowledge production about biology's proper objects? What, sorts of methodologies can help us to know our worlds beyond, the nature/culture binary? What might an interdisciplinary, biology look like? Students will gain hands on research, experience in "queer feminist science studies" through,

collaboration with the professor and one another and by, applying the conceptual and methodological tools explored, throughout the semester in the development of independent, projects related to their own interests. The class will be, experimental and research-intensive. Previous coursework in, science studies and/or critical theory helpful.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: MW 10:30AM-11:50AM

Location: FPH 106

CSI-0246-1 **Black Boyhood Studies**

Professor: Tammy Owens

From the success of the Oscar-winning film *Moonlight* to the, global popularity of hip-hop stars Chance the Rapper and, Kendrick Lamar, America indulges in the cultural work that, young black men and boys create to express their unique, experiences at the intersections of race, youth, and, masculinity in film and music. Yet, when black boys and, young men are not on stage or the screen performing to, entertain spectators, they are oftentimes perceived as, threats and violently policed, incarcerated, and killed., This course explores how the interconnections of race,, gender, youth, and geography influence performances and, cultural perceptions of black masculinities in America since, the twentieth century. Students will use Queer of Color and, Feminist theories to analyze representations of black, masculinity in literature (e.g., Kiese Laymon, Richard, Wright), film, art, music, and social media. Students will, also study current social science research on black, masculinities in Boyhood Studies.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: MW 01:00PM-02:20PM

Location: FPH 108

CSI-0254-1 **The Black Feminist Archive**

Professor: Tammy Owens

The hashtags #sayhername #blackgirlmagic #blackjoy, #blacklivesmatter #intersectionalfeminist and others are, rooted in a long history of Black Feminist consciousness in, the U.S. While these hashtags have made feminism more, accessible to people across multiple lines of difference,, they have also silenced a rich genealogy of black women and, black queer intellectuals, educators, and activists who, created the original theories long before the hashtag was, created. Thus, the creators are not cited for their work and, originality, but rather relegated to the dark corners of, history. In this course, students will follow the hashtag, offline to recover its intellectual roots. Analyzing films,, archives, texts, and social media, students will examine key, issues and scholarly interventions in Black Feminist Thought, from the nineteenth century to present. Throughout the, course, students will create a web-based hashtag archive, that links some of the most popular hashtags to Black, Feminist thinkers.

Instructor Permission: NO Satisfies Distribution: CHL, PCSJ This course has a Prerequisite: NO

Time: M 04:00PM-07:00PM

Location: FPH 104

CSI-0272-1 From Choice to Justice

Professor: Marlene Fried

Abortion rights continue to be contested in the U.S. and, throughout the world. Since the legalization of abortion in the U.S. in 1973, there have been significant erosions in, abortion rights and access to abortion. Harassment of, abortion clinics, providers, and clinic personnel by, opponents of abortion is routine, and there have been, several instances of deadly violence. This course examines, the abortion debate in the U.S., looking historically at the, period before legalization up to the present. We explore the, ethical, political and legal dimensions of the issue and, investigate the anti-abortion and abortion rights movements., We view the abortion battle in the U.S. in the wider, framework of reproductive justice. Specific topics of, inquiry include: abortion worldwide, coercive contraception, and sterilization abuse, welfare rights, population control,, and the criminalization of pregnancy.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: FPH 104

CSI-0275-1 Hopes and Fears

Professor: James Wald

What can the hopes and fears of a given society tell us, about it and ourselves? Did the gravest "sins" in old Europe, and the North American colonies involve food, money, or sex?, Among the hallmarks of modernity were the rise of new social, formations (classes) and the commercialization of daily, activities and relations. Did traditional institutions and, belief systems hamper or facilitate the changes? What roles, did religious and national contexts play? Did the increase, in the sheer number of "things" change the way people, thought? What changes did the family and private life, undergo? At the heart of the course is the concept of, culture as a process through which individuals and groups, struggle to shape and make sense of their social, institutions and daily lives. A core course in history, the, social sciences, and cultural studies.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: WF 10:30AM-11:50AM

Location: FPH 104

CSI-0276-1 Writing About the Outdoors

Professor: William Ryan

This seminar will explore approaches to writing about people in, the outdoors - as they live, die, love, work, play, transform, nature, or simply contemplate the world. We will read and study a number of genres including traditional nature writing, historical, accounts, creative nonfiction, fiction, and academic analyses. These readings will serve both as models of good writing and as introductions to the rich discourse about people in the outdoors. There will be regular writing assignments, including portraits, analysis of primary historical materials, literary journalism, advocacy, and creative expression. Students will be expected to contribute to class discussion and group critique in an informed, and constructive manner.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: WF 10:30AM-11:50AM

Location: FPH 105

CSI-0304-1 **Autoethnography**

Professor: Rachel Engmann

In this course, our aim is to study the theoretical and, methodological approaches involved in autoethnography. Certainly, autoethnography has attracted much attention in the academy with regard to its role in critical social, research; scholars and students feel indifferent about it, attracted to it, or repulsed by it. Autoethnography is, based upon developments in the field of anthropology for, example, understanding the limits of scientific knowledge, the role of interlocutor, and appreciation for personal, narrative. It draws from anthropological concerns over the, importance of ethics and politics of representation, identity politics and personal experience. Thus, throughout, the course, we will discuss how authors and critics of, autoethnography products foreground, challenge and, problematize the notion of the "Self" in relation to others. We will also work on activities, vignettes, writing prompts, and narrative translations tools that students can apply to, their research projects. Students must have a final project, to participate in this class.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: M 01:00PM-03:50PM

Location: FPH 104

CSI-0305-1 **Div III Seminar**

Professor: George Fourlas

This Division III seminar will focus on philosophical, methods in writing and research. A specific emphasis will be, placed on concept analysis and genealogy as critical, frameworks for building, expanding, and

sustaining, social-political research projects. Students will be, expected to share their Div III research for class critique.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TH 09:00AM-11:50AM

Location: FPH 103

CSI-0307-1 **Div III Seminar**

Professor: Kimberly Chang

This course is for Division III students who are in their, final semester and whose projects are based on ethnography,, interviewing, oral history, community-engaged research, and, other participatory methodologies. The course will be, organized around students' Division III projects and will, focus on writing as a critical juncture in the research, process when questions of interpretation and representation, loom large. We will begin by considering some interpretive, strategies and writing choices that may help students find, the forms needed to write within and across the communities, that comprise their research. Students will be responsible, for presenting their Division III work-in-progress several, times during the semester and for providing written and, verbal feedback on one another's work.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: NO

Time: W 02:30PM-05:20PM

Location: FPH 105

HACU-0150-1 **B&W Photography & 16mm Filmkg**

Professor: Kane Stewart

This workshop will introduce students to the fundamentals of, B&W photography, stop-motion animation, and 16mm analog, filmmaking. Students will be expected to learn the basics of, these media formats and present work for class critique., Contemporary and historical photographic and film works will, be shown and discussed as will assigned critical readings., Students taking this course will be expected to produce two, to three extended final projects over the duration of the, semester, working individually and in collaboration with, others in the class. Engaged participation is a critical, component of this course and it will, along with an end of, the semester portfolio, figure prominently in course, evaluations.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: T 09:00AM-11:50AM TH 09:00AM-11:50AM

Location: JLC 131, JLC 131

HACU-0173-1 **Sex & Science**

Professor: Lise Sanders, Pamela Stone

How did Victorians conceive of the body? In a culture, associated in the popular imagination with modesty and, propriety, even prudishness, discussions of sexuality and, physicality flourished. This course explores both fictional, and non-fictional texts from nineteenth-century Britain in, conjunction with modern scientific and critical, perspectives. We will discuss debates over corsetry and, tight-lacing, dress reform, prostitution, and the Contagious, Diseases Acts, sexology, hysteria, and other topics relating, to science and the body, alongside novels, poetry, and prose, by major Victorian writers. The writings of Freud, Foucault,, and other theorists, as well as writings in the natural and, biological sciences, will assist us in contextualizing, nineteenth-century discourses of gender, sexuality, race,, and embodiment. Several shorter papers and a longer research, project will be required.

Instructor Permission: NO Satisfies Distribution: CHL, MBI This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: FPH 108

HACU-0193-1 **Ancient Ireland**

Professor: Robert Meagher

An introduction to the archaeology, myth, history, art,, literature, and religion of ancient Ireland: 4000 BCE to, 1200 CE, from the earliest megalithic monuments to the, Norman conquest. Consideration will be given, then, to these, distinct periods: Pre-Celtic (Neolithic and Bronze, Ages--4000 BCE-700 BCE); Pre-Christian Celtic (Late Bronze &, Iron Ages--700 BCE-400 CE); and Early Christian Celtic, (Irish Golden Ages and Medieval--700-1200 CE). The emphasis, throughout will be on the study of primary material, whether, artifacts or documents. Readings will include: selections, from the Mythological, Ulster, and Finn Cycles; The Voyage, of St. Brendan; The History and Topography of Ireland by, Giraldus Cambrensis; the writings of Patrick; and selections, from early Irish hagiography.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: EDH 2

HACU-0199-1 **Hashtags, Memes, and Trolls**

Professor: Professor Loza

Although early internet theorists imagined the World Wide Web as, a wild frontier where only minds mattered, social media testifies, to the lasting force of bodily inscriptions like race, gender,, sexuality, dis/ability, and class. In this course, we will, consider how identity shapes how we communicate, debate,, collaborate, and mobilize online. We will investigate how, different populations engage with

digital technologies and social, media in particular; how such environments expedite stereotypes, and construct difference; and how online platforms like YouTube,, Twitter, and Facebook are tools of social justice as well as, replicators of reactionary ideologies. Our critical arsenal will, draw upon Media Studies, Gender & Sexuality Studies, Cultural, Studies, and Ethnic Studies. We will apply these theories to, current events online. Throughout our examination of the politics, of hashtags, memes, and trolls, we will foreground the ways that, power relations continue to inform how bodies travel through the, digital realm.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: EDH 2

HACU-0206-1 AdvBeg Dance Tech-HALF CREDIT

Professor: Erin Kouwe

This course is an advanced-beginning level class, which will, deepen students' foundational experience with modern and, contemporary dance techniques. The studio will be our laboratory, as we explore of a wide range of modern dance concepts with a, focus on sensation, initiation, expansive use of space,, efficiency, safety, connectivity and embodiment of phrase work., Along the way, we will also bring attention to alignment, spatial, clarity, use of breath, increasing range of motion and the, development of strength and stamina as way to nurture sustainable, and deeply engaged dance practice.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: MDB MAIN

HACU-0209-1 Production Sketchbook

Professor: Patricia Montoya

Video, still images and sound are used in this course to, explore the fundamental character of storytelling,, filmmaking and time-based art practices. Students perform, all aspects of production with particular attention to, developing ideas and building analytical and critical, skills. We will read seminal written work and interviews, with practicing avant-garde artists in order to expand our, knowledge, understanding, and love for the medium. Through, exercises that include in-class and weekly projects,, students will produce sketches aimed at exploring video as, an experimentation tool. There will be special emphasis paid, to sound design that includes original music, and ambient, sound gathered with a separate sound recorder. The class, will review the history of video art to give students the, basic theoretical tools to critique their own productions, and develop an understanding of the possibilities that, medium offers.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: T 01:00PM-03:50PM M 07:00PM-09:00PM

Location: JLC 120, JLC 120

HACU-0211-1 Photo li, Color Photography

Professor: Claudio Nolasco

This course is a thorough introduction to color/digital, photography. Weekly project-based assignments and critiques, address students' aesthetic and technical progress; readings and, discussions will introduce students to historical and, contemporary art practices, with an emphasis on current, photographic theory. Lab sessions will cover a range of, techniques including the nuances of color, color film, digital, capture, color management and archival inkjet printing. An, additional lab workshop will meet once a week for two hours.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: M 01:00PM-04:20PM

Location: JLC 131

HACU-0227-1 Theories of Mod/Contemp Art

Professor: Christoph Cox

This course will examine the ways that 20th- and, 21st-century philosophers, theorists, and critics have, approached the art of their time, and the ways that modern, and contemporary art illuminates and grounds theoretical, projects. Via writings by philosophers, theorists, critics,, and artists, we will traverse a selected history of 20th-, and 21st-century art guided by a selected history of, contemporary philosophy and art theory. The course will, survey artistic movements such as modernism, postmodernism,, conceptualism, minimalism, institutional critique,, performance, relational aesthetics, and social practice, and, will examine critical approaches such as formalism,, psychoanalysis, poststructuralism, deconstruction, new, materialism, and object-oriented ontology.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: EDH 4

HACU-0232-1 Topics in Film Studies

Professor: Lise Sanders

This course is designed to introduce students to key issues, in film studies, focusing on cinema in the United States, from the silent era to the present. We will pay particular, attention to discourses of racial identity, gender, difference, and sexuality on screen, reading early,, classical, and recent films in the context of contemporary, conversations about politics, equity, and social justice., The course will

highlight the history of filmmaking by women, and people of color (including Dorothy Arzner, Julie Dash,, Maya Deren, Sessue Hayakawa, Oscar Micheaux, Jordan Peele,, and Lois Weber, among others) in an effort to critique and, expand the film studies canon. Several short papers and, in-class discussions will address how to interpret film on, the formal/stylistic level (sequence analysis, close, reading, visual language) as well as in the context of major, trends and figures in film history.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: MW 01:00PM-02:20PM TH 07:00PM-10:00PM

Location: FPH 102, FPH 102

HACU-0243-1 **Physics and Metaphysics**

Professor: Christoph Cox, Kaca Bradonjic

What are the basic features of reality? Where and when do, these things exist? How and why do they change? This course, will explore the ways that physicists and philosophers have, answered these questions and have dealt with reconciling, incompatible perspectives. Students will engage these, questions through reading, writing, observation,, mathematical problem-solving, art-making, and active, discussion. We will use high school algebra and graphs to, understand the fundamentals of Einstein's special theory of, relativity and quantum mechanics; and we will consider, philosophical theories about the nature of reality, time,, space, and change through texts by Western and non-Western, philosophers. Along the way, we will ask: How do we decide, what is real? Does observation take precedence over theory, (or vice versa)? What role do models and imagination play in, this inquiry? What are the structures of authority that, legitimize scientific and philosophical claims? No prior, exposure to physics or philosophy is required.

Instructor Permission: NO Satisfies Distribution: CHL, PBS This course has a Prerequisite: NO

Time: MW 04:00PM-05:20PM

Location: EDH 2

HACU-0245-1 **Sound Cultures: Unpack'g Music**

Professor: Daniel Warner, Junko Oba

This course explores and critically examines what, constitutes "music" and its manifold practices. Presented, from transdisciplinary and multicultural points of view, the, course consists of several thematic modules, in each of, which two instructors will lead the unpacking of specific, subjects, such as the nature of sound, listening, sonic, realization of time, musical space, and embodiment. By using, different kinds of expertise and methodologies drawn from, music theory, sound studies, ethnomusicology, etc., the, music we analyze will represent diverse traditions around, the world as well as contemporary sound practices, representing various, global styles. No previous training in music theory is, necessary, but the required coursework includes weekly, listening, creative transcription,

various analysis, assignments, and hands-on performative activities. Through, these exercises, selected readings, and class discussion,, students are invited to open their ears, senses, and minds, to unique cultural values, sensibilities, and practices, and, rigorously question their conception of "music" and musical, discourses.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: MW 02:30PM-03:50PM

Location: MDB RECITAL

HACU-0247-1 **Deviant Bodies**

Professor: Professor Loza

Since its founding, the US has closely regulated the bodies, of Others and punished those that rebel against these, socially-constructed designations. Utilizing an, interdisciplinary amalgam of Critical Race Theory, Sexuality, Studies, Queer Theory, Media Studies, Sociology, American, Studies, Performance Studies, and Feminist Theory, this, course will explore how the state, the media, and civilian, institutions police the boundaries of race, gender, and, sexuality by pathologizing, criminalizing, and stigmatizing, difference. We will also examine how the subjects burdened, with these dangerous inscriptions evade and contest them, through passing, performativity, and other forms of, identity-based resistance. Special attention will be paid, to the criminalization of cross-racial and same sex desire,, the re-biologization of racial and sexual difference; the, dehumanization of immigrants; the racialization of crime;,, the gendering of mental disorder; the rise of, homonormativity; genetic surveillance; the biopolitics of, reproduction; and the role of The Law in constructing and, controlling deviant bodies.

Instructor Permission: NO Satisfies Distribution: PCSJ This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM

Location: EDH 2

HACU-0255-1 **Research and Creative Practice**

Professor: Hope Tucker

This course provides an opportunity for students to discover, what research practice can look like for those working in, film, photography, video, installation, and related and, interdisciplinary new and old media forms. By looking, within texts by artists, filmmakers, photographers,, performers, poets, and journalists, such as Joan Beifuss,, Duncan Campbell, Tacita Dean, Sharon Greytak, Naomi Kawase,, Spike Lee, Mary Ellen Mark, Mike Nichols, Mika Rottenberg,, Doris Salcedo, Chick Strand, Camilo Jose Vergara, Travis, Wilkerson, Peter Watkins, and Kevin Jerome Everson, the, class will examine research-based approaches to developing,, creating and realizing new works. Readings, screenings,, creative exercises, library workshops and artist talks which, address conceptual approaches, working methods, and a range, of research strategies will allow students to deepen their, research skills as they develop and manage

projects of their, own. Each student is required to present their work in, various stages throughout the semester. The members of the, class will provide critical, technical and production, support for one another. Active verbal contributions to all, sessions are required of each student under the guiding, principle that tracking each other's intellectual and, creative process will help each person develop their, respective project. This course provides a structured, context in which to do research intensive work at the, Division II level. Enrolled students and top 5 waitlist, students who DO NOT attend the first class session risk, losing their place on the class roster.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TH 09:00AM-11:50AM W 06:00PM-08:00PM

Location: JLC 120, JLC 120

HACU-0263-1 **Illustration**

Professor: Andrea Dezso

In this labor-intensive class, we will explore the potential, of illustration as visual narrative based on assignments and, prompts, using a range of materials and artistic approaches., Students will create illustrations to accompany fiction and, non-fiction works from fairytales to op-ed articles, from, song lyrics to journal entries; purely visual pieces and, works that integrate both words and images. We will examine, narrative illustrations from a range of periods and, cultures. Every student will keep a sketchbook or visual, journal in which they will develop ideas and document their, artistic process and experiments.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: F 01:00PM-05:00PM

Location: ARB STUDIO 1

HACU-0265-1 **Death in Film Video Media Arts**

Professor: Patricia Montoya

In this class, we will not only be looking at death as the, "only absolute in life," that either "shadows or illuminates, our lives," but also the way it is represented in, contemporary film, video, and media. We could argue that, death is the ultimate "media event" in contemporary society., When we are talking about cyborgs, vampires, terrorism, dead, princesses, immortal artists, we are thinking about death., However, we will also be looking at social justice movements, that defy undignified representations of death and dying, such as black joy and Black Lives Matter, The Order of the, Good Death, and the socio-political circumstances that, surround them, such as social unrest, police brutality,, denial of death, catastrophic events and war. This course is, a seminar-based class where students will be presenting, PowerPoint presentations, still and moving image projects,, papers and discussions to engage with the readings and, screenings discussed in class.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: T 05:30PM-08:20PM M 05:00PM-07:00PM

Location: JLC 120, JLC 120

HACU-0269-1 CMYK: Graphic Design Studio

Professor: Thomas Long

Graphic design is a creative and critical practice at the intersection of communication and abstraction. The process of learning graphic design is two-fold, and students in this course will engage both areas: first, students will develop knowledge and fluency with design skills--in this case,, software (Adobe Photoshop/Illustrator); second students will address the challenges of design head-on through discussion,, practice, iteration, critique and experimentation. The projects will challenge students to explore raster and vector graphic forms, color theory and typography in creative, experimental ways to reach their objectives., Techniques, approaches, styles and processes for representing numbers, maps, philosophies and ideas will be introduced throughout the course. As a studio and software course, it will be fast-paced and immersive and will require a substantial amount of work outside of class time. The course will be made up of several small, fast-paced projects, and culminate in one longer, more engaged print design project. This course is geared toward students with a design-focused course of study. Preference will be given to architecture and graphic design-focused students. Instructor Permission is required.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: TTH 01:00PM-03:50PM

Location: EDH 3

HACU-0276-1 Movable Artists Books Studio

Professor: Andrea Dezso

Learn to make books that pop up, transform, unfold, expand,, books that become theaters, movable structures or interactive experiences: movable books. Treat form and content as an interdependent whole as you create your own, movable artists books in this hands-on, labor-intensive, class. Research into historic and contemporary examples of paper engineering and movable books will inform our inquiry., If you have an interest in art, books, visual storytelling,, or paper engineering and love to make things with your hands, this is a class for you.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TH 01:00PM-03:50PM

Location: ARB STUDIO 1

HACU-0279-1 Dance Improvisation

Professor: Lailye Weidman

In this course, students will immerse in and craft, improvisational approaches to movement and, performance-developing both a training ground and, performance troupe. Together, training in ensemble, solo,, and partner work, we will develop skills for group, listening, responding to architecture and environment,, working with sound and music, and dancing from sensation and, perception. There will be opportunities for performance, throughout the semester. We will craft performance, structures (scores) and improvisational choreographies, through which we can enter the unknown or "lesser known", territory of improvisational choice-making on stage. This, course will build on previous experience of dance and, dance-making and also welcomes performing artists with any, background or those with a desire to jump into an, exploration of improvisation and performance.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TTH 10:00AM-11:50AM

Location: MDB MAIN

HACU-0287-1 The Photobook

Professor: Claudio Nolasco

We are currently living through a golden age of photobooks., Over the past decade, there has been an explosion of renewed, interest in the creative and narrative possibilities of the, photobook format. We will explore this resurgence by, studying examples of notable historical and contemporary, works in this medium, paying special attention to the, changes in technology that have allowed for the growth of, small press and DIY publishing. Along with becoming familiar, with the current state of photobook production and, discourse, students will create their own books as well. In, this course, students will learn editing and sequencing, strategies that will aid in translating their photography, into the many forms, from 'Zines to full monographs, that, the photobook can occupy. Using Adobe InDesign, students, will practice basic design and layout principles,, hand-produce professional quality maquettes and book, dummies, and explore the now widely available options for, on-demand printing through services such as Blurb, MagCloud,, and many others.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 09:00AM-11:50AM

Location: JLC 131

HACU-0294-1 Arts Ecologies

Professor: Deborah Goffe

How does one sustain a life in the arts? While this question, looms large for lovers of the arts, a host of other, questions lurk just beneath the surface: How is success, defined and redefined? Where are the

points of entry and who, are the gatekeepers? How do performance, making,, educational, community-engaged, curatorial, and scholarly, practices relate to one another and to the organizational, structures that support them? What is the role of place?, Drawing inspiration from the interconnectedness inherent in, ecological frameworks, this course will function as a think, tank of sorts, inviting dialogue around the evolution of, existing arts infrastructures and our place in their, futures. Through critical discourse, research, and, entrepreneurial strategies, and with special emphasis on, performing arts, we will imagine holistic and innovative, approaches to sustained arts engagement that are responsive, to social, cultural and economic realities. This course is, geared for upper Division II & III aspiring practitioners,, administrators, entrepreneurs, curators, scholars, cultural, critics, and advocates of the arts.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: MW 10:30AM-11:50AM

Location: MDB SMALL

HACU-0307-1 **Design Concentrator Studio**

Professor: Thomas Long

This course is geared toward Division III students and Five, College seniors completing or anticipating advanced, architectural or other design studio projects. The Advanced, Design + Media Lab course provides a structured and critical, creative environment for students to explore, experiment and, design in both an individual and collaborative studio, setting. In this course, students will develop their own, individual design projects, identifying their own approach,, scope and thesis, then executing their creative acts, throughout the semester. As a concentrator's course,, students will be expected to engage in both the creative, challenges presented by the course while working on their, own independent semester-long projects. This course is, highly interdisciplinary in nature, yet designed for, students developing projects in various areas of graphic, design, industrial design, environmental studies,, architecture and urban planning. This course will be marked, by a brief, intense reading and discussion period, followed, by both writing and design production on topics both culled, from our readings and individual student projects. This, course requires substantial out-of-class studio work and, commitments to a rigorous schedule of production,, culminating in a collective exhibition at the end of the, semester. Students must have an individual project in mind, or in progress at the start of the term. For non-Hampshire, students, students should have an established work, methodology and taken several studios in art or, architectural design. Students will develop work for a, collective exhibition at the end of the semester. Priority, for acceptance will be given to upper-level students,, Contact Thom Long at tlong@hampshire.edu for details.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: TTH 09:00AM-11:50AM

Location: EDH 3

HACU-0331-1 **Computer Music: Max/Msp/Max4li**

Professor: Daniel Warner

This course will focus on a wide range of topics in sound, synthesis and music composition using the MAX/MSP and Max4Live, program. Students will undertake projects in interactive MIDI, composition, algorithmic composition, additive and subtractive, synthesis, waveshaping, AM/FM synthesis, and sampling. Other, topics to be covered include SYSEX programming, sound analysis,, theories of timbre, and concepts of musical time.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: TTH 02:30PM-03:50PM

Location: LIB B2

HACU-0399-1 **Concentrators Film/Photo/Video**

Professor: Hope Tucker

This course is open to all film, photography, video, and, installation concentrators and, by consent of the instructor,, others working in adjacent disciplines in their first or second, semester of Division III. Division III contracts must have been, filed prior to enrollment. The class will integrate the, procedural and formal concentration requirements of the College, with the creative work produced by each student. Concentrators, will offer a forum for meaningful criticism, exchange, and, exposure to each other's processes and projects. The course will, include visits by guest artists and discussion of post-graduate, options. There will be a \$65 lab fee. This course may be used as, an Advanced Learning Activity towards graduation. Enrolled or top, 5 waitlist students who do not attend the first session risk, losing their place on the class roster.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: W 01:00PM-05:00PM

Location: JLC 131

IA-0146-1 **From Hacking to Production**

Professor: Wouter Schievink

From Hacking to Production will explore the creative arsenal, available to the contemporary electronics hobbyist. There, will be in-class discussions about the flaws and triumphs of, modern electrical devices. We will cover the basics of, electrical theory, analog electrical technology, digital, technology, 3D printing, circuit board design and micro, controllers. This class will allow students to creatively, engage in the world of electronics while also learning how, to use electronics to create useful practical electrical, devices that are ready for production. Much of this class, will be hands-on soldering, wiring and fabrication in the, center for design.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: MW 10:30AM-11:50AM

Location: LCD SHOP

IA-0148-1 Intro to Metal Shop

Professor: Mary Katherine Cleary

The intent of this course is to provide a supportive space, for traditionally underserved students to acquire hands-on, fabrication shop skills. Students will be introduced to the, basic tools, equipment, machinery and resources available, through the Lemelson Center. We will cover basic elements of, design and project planning. Students will be expected to, participate in discussions of their own and each other's, work. Upon completion of the course, participants will have, start-to-finish experience with several projects, a working, knowledge of many tools in the shop, and the skills needed, to go forward with their own ideas.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: W 04:00PM-05:20PM M 07:00PM-09:20PM

Location: LCD 113, LCD 113

IA-0162-1 The Short Novel

Professor: Alejandro Cuellar

The short novel is a unique form. It has all of the elements, of pace found in a short story without the constraints of, time and scope, and remains sufficiently expansive to allow, for the presence of a broader-length narrative. In this, course we will explore the parameters of various short, novels--their structure, focus, intent, and scope--by trying, to read them as writers would. We will discuss the choices, of writers such as Morrison, Rhys, Baldwin, Moore, and, Ferrante with respect to the above criteria--and attempt to, determine the efficacy of the short novel as form. Students, will write short responses to each reading, as well as three, larger (3-5 page) papers. The overall aim of the course is, to be a better writer by being a better reader.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: RWK 202

IA-0203-1 Design Driven Performance

Professor: Peter Kallok

Working collaboratively and individually, students will, undertake a series of design exercises as they

work toward, shaping "performances" that are inspired by design ideas., Traditionally, theatre directors, playwrights, or actors, take the lead in creating performed projects. What happens, when designers initiate theatrical work? How can design, speak to an audience? How does design develop narrative,, tension, and conflict? After an introduction to the, individual theatre design disciplines, we will examine, methods that can carry an audience and sustain engagement., Design Driven performance, also known as design-led, performance, occurs when the performance impulse manifests, itself through technology and design expression. The tools:, space, light, sound, props, projection, scenery, visual and, aural elements drive a theatrical presentation. No script to, follow, but words may inspire. A moment, a feeling, a mood,, a sensation, a conflict might prompt, but instead of, urging/massaging the response through words, one improvises, or experiments with design elements-devising with design., Throughout the semester we will survey the work of selected, artists while analyzing how they mix traditional theatre, design forms (sound, lighting, costumes, scenery, props), with new media and technology. With the assistance of, classmates, students will develop and "perform" individual, pieces inspired by their own design visions-devising using, theatre design elements.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: MW 10:30AM-11:50AM

Location: EDH 104

IA-0221-1 **Out of Character**

Professor: Djola Branner

The focus of this workshop course is self-scripting and, performing dramatic material. Students will edit and revise, written drafts based on hearing and performing their work, aloud. Particular attention will be paid to writing, dramatically from different points of view. The same events, and circumstances, when recounted by one individual, may be, utterly altered when recounted by someone else. Likewise,, one individual may have a completely different perspective, on the same event when speaking from a different state of, emotion (i.e. a state of anger versus a state forgiveness.) , We will explore ways in which gender, class, culture shift, the playwright's perceptions, and use rhythm, syntax,, breath, and gestural language to create dynamic characters, for the stage. We will also read and deconstruct, contemporary monologues and scenes of writers such as Anna, Deveare Smith, John Leguizamo, Lisa Kron, Laurie Carlos and, Eric Bogosian.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: M 01:00PM-03:50PM

Location: EDH 2

IA-0222-1 **Community-Based Theater**

Professor: William (Will) MacAdams

Across the country - and around the world - theater artists, are creating work with organizers, elders, young people, and, those whose stories are rarely on stage but who form the, living heart of communities. Rejecting the belief that, theater can only happen on traditional stages, this work is, made in farming towns, on city blocks, in indigenous, communities, and in places in between - and celebrates the, ritualistic roots of theatre while building the future, through partnerships with movements for justice and healing., Through reading and creative practice, students in this, course will study this vibrant art form and create original, works of theatre across the campus and beyond, with members, of your own communities and in places you call home. Theatre, experience is not required.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: EDH 104

IA-0223-1 **"It's Alive"**

Professor: Nathan McClain

Too often African Americans exist, as Ralph Ellison's, narrator in Invisible Man remarks, as "phantom[s] in other, people's minds," imagined as monsters, which also extends, into American Literature. For centuries, stories and, fantasies have been heaped upon Black bodies, and it shows, no signs of slowing. But how does African American, Literature see its protagonist, see the self, and has that, self-image been colored by how it has been held in the, imagination of others? In this course, students will, continually engage notions of the monstrous in African, American Literature, and they should expect to draft and, revise essays and reading responses that analyze and, interrogate the work of various African American writers and, artists, considering the relationship between horror, the, gothic, and our own complicated history, personal and, cultural. Students may read and consider the work of Toni, Morrison, Cornelius Eady, Victor LaValle, Elizabeth Young,, and Niela Orr, among others.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: RWK 202

IA-0229-1 **Object and Environment**

Professor: Gregory Kline

In this course students will explore the sculptural object, as a self-contained form and as an element within a found or, created environment. Traditional materials such as steel,, wood, plaster and concrete will be taught concurrently with, more ephemeral materials including paper, wire mesh and, found materials. Ideas originating within the traditions of, modernism, postmodernism, minimalism, post minimalism,, installation art and public art will be introduced through, slide lectures, readings and

independent research. The course will culminate in an independent project. An introductory level course in sculpture is strongly recommended.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: MW 01:00PM-03:50PM MW 01:00PM-03:50PM

Location: ARB SCULPT, ARB SCULPT

IA-0244-1 **Diving Through the Page**

Professor: Thuy Le

"One does not look through writing on to reality - as, through a clean or dirty windowpane. Words are never, transparent. They create their own space, the space of, experience, not that of existence..." -John Berger. This, class will be a combination of an excavation of experience, and a deep-sea dive beyond. Through a broad selection of, readings--James Baldwin, Emily Dickinson, Lucille Clifton,, Julie Otsuka, and others--we will carefully consider the, many ways in which a piece of writing creates its own space,, one a reader can fully enter, and the ways in which truth is, harnessed and released through that space. Through guided, exercises, participants will aim to cultivate the clarity of, their writing voice and apply this clarity toward the, creation, on the page, of spaces marked by both the, ambiguity of experience and the radical promise of, imagination.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM

Location: EDH 4

IA-0249-1 **Intermediate Painting**

Professor: Serena Aurora Himmelfarb

Based on the idea that the creative process is a cycle of, rambling and synthesis, this course will value, self-reflection as much as material output, encouraging an, understanding of thinking and doing as equal partners in, making art. Presentations on independent work and, inspirations will invite a collaborative atmosphere. A, non-medium specific course, less emphasis will be placed on, specific techniques, and more on developing one's voice., Guided but student-led work will be presented in, student-driven critiques, giving everyone the opportunity to, receive feedback while practicing critical thinking and, speaking about art.

Instructor Permission: NO Satisfies Distribution: ADM This course has a Prerequisite: NO

Time: MW 01:00PM-03:50PM

Location: ARB STUDIO 2

IA-0252-1 **Poetry & Curiosity**

Professor: Amy Dryansky

Poetry is an act of discovery. We write to discover what we, don't know or understand about ourselves and the world, around us. To make these discoveries we must pay attention:, practice close observation, question our assumptions, and, test our truths. In this way, poetry is a kind of research,, and not so different than other fields. In this class, we'll, look at poems that have curiosity and research at their, score: scientific, historic, cultural and social. We'll, develop our abilities as researchers and writers through, on-site exercises, the cultivation of a writer's notebook,, close readings and regular writing practice. We'll look at, books by Elizabeth Bradfield, Camille Dungy, Terrance Hayes,, Tyehimba Jess, Layli Longsoldier, Mary Peelen, Solmaz, Sharif, Javier Zamora and others, and make our own curious, poem collections. No prerequisites, but participants must be, willing to read deeply, write regularly, and engage in class, discussions with energetic curiosity and take occasional, field trips (mostly on-campus).

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM

Location: ASH 221

IA-0259-1 Intermediate Studio Art Projec

Professor: Serena Aurora Himmelfarb

This studio arts course will explore a broad range of studio, strategies, processes, and materials. Guided, student-led, projects will be presented in student-driven critiques., Students will undertake research strategies particular to, their interests and processes, and will be expected to, reflect on this research in written responses. Slide, lectures will introduce the class to contemporary and, historical artists and art movements across cultural, perspectives. From the dollhouse to the forest, soft, sculpture to performative objects, this course embraces an, expanded definition of the arts.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: M 06:00PM-08:50PM

Location: ARB STUDIO 2

IA-0262-1 Longform Prose

Professor: Alejandro Cuellar

In this course, we will look closely at the structure of, longform prose, including non-fiction as well as fiction. We, will read longform essays, a short story collection, and a, novel, and we will consider how each is organized by paying, close attention to how the craft of each serves the content,, and vice versa. We will then read and workshop short, stories, longform non-fiction, and novel excerpts by your, peers, paying attention to craft in the service of content,, and how all of that affects the reader's understanding of, the piece. You will submit two pieces for workshop, and, write one 3-5 page analytical

essay that engages with the, published material. Published works from Ta-Nehisi Coates,, Lauren Groff, and Javier Marias may be included. This is an, intermediate creative writing workshop and is ideal for, rising Division III students.

Instructor Permission: NO Satisfies Distribution: CHL This course has a Prerequisite: NO

Time: M 04:00PM-06:50PM

Location: FPH 106

IA-0273-1 **Theater Directing Lab**

Professor: William (Will) MacAdams

This course is a hands-on, practical approach to directing, guided by the belief that "directors learn to direct by, directing." Our focus is on the collaboration between, performer and director and on challenging outdated notions, of power by bringing your full selves - in your complexity, and with the fullness of your identities - to the embodied, practice of directing. The pace will be rapid and the, workload significant: every three classes, you will either, present a piece that you have directed or perform in a work, directed by your peers. Rehearsals will take place outside, of class. During the first part of the course, our work will, be largely devised and ensemble-created. The second part of, the course will focus on text-driven work. Throughout, you, will explore, take risks, experience the joys and challenges, of collaboration, and work together to make vital work., Previous directing experience is not required.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM

Location: EDH 104

IA-0280-1 **Sculpture Mold Making&Casting**

Professor: Gregory Kline

This studio course introduces intermediate level sculpture, and studio art concentrators to mold making and casting, processes. Students will be exposed to a range of cast, sculpture, both historic and contemporary, via books and, slide lectures. Through assignments and independent work,, students will explore the process of mold making and casting, through a range of different materials including Plaster,, Latex rubber, Urethane rubber, and thermoplastics. Students, will research historical and contemporary artists who, utilize casting and present relevant work for class, discussion. The course will culminate in an ambitious, independent project.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: MW 09:30AM-11:50AM MW 09:30AM-11:50AM

Location: ARB SCULPT, ARB SCULPT

IA-0282-1 **Light Art - Lightworks**

Professor: Peter Kallok

Light Art encourages us to slow down, wait, observe, absorb,, perceive, and feel. Light art is immersive, it alters our, mental and emotional state. Light art truly invites us into, it, not in the figurative manner that all art can, but, literally. You pass through it, and it devours you. Whether, it's calming, agitating, or whimsical, light can provoke, thought or initiate a chuckle. Within a studio format, the class will manipulate light and explore light as sculpture, and environment. We will tell stories and design light-based, games or puzzles. We will create acts of guerilla lighting., Using theatre lighting instruments and a vast array of other, light-emitting sources, students will create individual, lightworks that express narratives, or simply reveal. We, will study color, color mixing, reflection, and refraction., As we experiment with how light defines and reinforces line,, movement, texture, and scale, we will develop skills and, techniques that will inform students' personal use of light, as an expressive medium. We will review the history of light, art as well as the works of several light artists.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: W 02:30PM-05:20PM

Location: EDH 104

IA-0287-1 **"Worstword Ho!"**

Professor: Nathan McClain

Samuel Beckett writes, in his short prose piece of the same, title: "Ever tried. Ever failed. No matter. Try again. Fail, again. Fail better." This will be a course about "try[ing], again," about "fail[ing] better". I have said, and fully, believe, that getting a draft down on paper is merely, drafting, is merely procuring the materials to write the, poem. The real work of writing comes in revision. It is, there we make our intent clear or sometimes even known in, the first place, and that discovery can completely change a, poem. To that end, this workshop will be solely focused, around revision, ideal for Div III or advanced Div II, students. Students may read and consider work by Ellen, Bryant Voigt, Stephen Dobyns, Louise Glück, James, Longenbach, and Carl Phillips, among others. This course, does require instructor permission, so, if interested,, please contact me via email as soon as possible for course, submission guidelines.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: W 04:00PM-06:50PM

Location: EDH 4

IA-0310-1 **Out of Now: Adv Wrtg Wkshp**

Professor: Thuy Le

In this workshop, participants will be encouraged to, identify the questions and concerns that drive their, creative work, consider approaches that may help to broaden, the scope of their questions, and then center their writing, around thematic elements that feel most urgent to explore. A, willingness to take risks in one's work--a desire to make, something new out of now--is crucial.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: M 02:30PM-05:20PM

Location: EDH 4

IACC-0101-1 Intro to Design in Metal

Professor: Thomas Brown

This course will introduce students to the many, possibilities available in the Center for Design at, Hampshire. The main focus of the class will involve, introduction to a myriad of processes, techniques, and ways, of working with metal. Both machine tool use and hand, working techniques will be explored, as well as forming,, joining and finishing techniques. Students will work on, projects beginning with prompts to get design ideas flowing,, and move into creating pieces of their own design.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: WF 01:00PM-03:50PM

Location: LCD SHOP

IACC-0311-1 Division III Writing Workshop

Professor: Alejandro Cuellar, William Ryan

Division III Writing Workshop: This workshop provides, assistance to students who are engaged in large writing, projects and research papers in any of Hampshire's five, schools. The course offers a structured, three-hour block of, time in which to write and receive feedback on pre-writing, (brainstorming, outlining, etc.), writing, and revision., Special attention will be paid to the writing process:, conceptualization, organization, and pacing oneself through, work blocks and writing anxieties. In addition to having, access to structured writing time, participants will have, the opportunity to meet individually with the instructor(s)., Because this class supplements work already in progress, no, formal instructor evaluations will be provided and the, completion of this workshop will not count as course credit, or advanced learning activity.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: W 02:30PM-05:00PM

Location: GRN WRC

NS-0120-1 Healing

Professor: Christopher Jarvis

This course is designed to introduce students to, complementary and alternative concepts in healing. Students, will work in teams of 3-4 to investigate an area of interest, in the health sciences. The groups will make extensive use, of the primary scientific and medical literature in an, effort to understand the use, effectiveness and limitations, of the particular treatments or approaches selected. Each, team member is responsible for some aspect of the research, and reports back to the whole group. The groups will present, their findings to the whole class. The students' goal was to, assess the effectiveness of the various therapies by, examining the available data carefully, explaining the, methodologies employed to examine the treatment and, critically reading the authors' conclusions. Examples of, past projects include acupuncture and pain, acupuncture and, osteoarthritis, yoga in stress reduction, herbal remedies, for allergies, art therapy in PTSD, and the use of music, therapy in chronic stress. Each student will have the, opportunity to work in two different groups over the, semester and to complete two projects and presentations., Students will also write biweekly critiques of papers from, the primary literature and revise these based on the, instructor's comments. The second revision was done using, peer editing and the final compilation of the three, critiques will be used in putting together their final, papers. All students will also be introduced to elementary, aspects of data analysis and statistics and some basic, immunology. We also will have presentations in message, therapy and acupuncture by local practitioners. A final, portfolio of all work will be used to evaluate the students, progress.

Instructor Permission: NO Satisfies Distribution: PBS This course has a Prerequisite: NO

Time: MW 01:00PM-02:20PM

Location: CSC 333

NS-0141-1 **Pattern and Color in Life**

Professor: Charles Ross

Pattern and Color in Life: Natural organisms provide an, unparalleled palette for almost every color and pattern, imaginable. Why do organisms have stripes and spots? Why, blue or red? This course will explore how and why various, colors and patterns are produced in the biological world. We, will investigate biochemical, genetic (and epigenetic),, developmental, and environmental mechanisms as well as, simple mathematical models to explain their production., Additionally, we will link patterns/colors to their, functions, such as defense, warning, camouflage,, communication, mate attraction, etc. We will use both, applied and primary scientific research literature to, explore topics in these areas. Semester long research, projects will be components of this course. Students will, research specific aspects or questions and present their, findings in written and oral format.

Instructor Permission: NO Satisfies Distribution: PBS This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: CSC 316

NS-0203-1 **Chemistry II**

Professor: Dulasiri Amarasiriwardena

This is a continuation of Chemistry I: the principles and concepts examined during the previous term, will be expanded and applied to more sophisticated systems., Topics will include chemical thermodynamics, nuclear, chemistry, chemical equilibrium, acid-base equilibria and, their applications, complex ion equilibria, and solubility,, oxidation-reduction reactions, electrochemistry, and, reaction rates. We will also emphasize application of those, chemical principles to environmental, biological, industrial, and day-to-day real-life situations. Problem sets will be, assigned throughout the semester. The laboratory will, consist of two project-based labs and some laboratory, exercises. Basic laboratory skills, chemical instrumentation, techniques, and the use of computers in the chemistry, laboratory will be emphasized. Prerequisite: Successful, completion of Chemistry I and its laboratory or instructor, permission.

Instructor Permission: YES Satisfies Distribution: This course has a Prerequisite: YES

Time: MWF 09:00AM-10:20AM M 01:00PM-04:00PM

Location: CSC 101, CSC 101

NS-0205-1 **Physics II**

Professor: Kaca Bradonjic

Fundamental forces of electricity and magnetism govern the, interactions of atoms and molecules, and consequently most, of macroscopic processes, from biological to astrophysical., Practical applications of electromagnetic theory include, electric motors, generators, communication systems,, telescopes, and medical diagnostic tools, such as EKG and, MRI. Physics II is a calculus-based introductory course on, electromagnetic theory and covers topics such as, electromagnetic induction, electric circuits, and basic, optics, both physical and geometric. The course will, approach these topics in the active-learning style, in which, hands-on lab activities are integrated with problem-solving, sessions and mini-lectures. It is aimed at all students, seeking the basic understanding of the electromagnetic, theory, and particularly at those on a premed track or, focusing on any of the physical sciences. Readings and, written work will be assigned for each class.

Instructor Permission: NO Satisfies Distribution: PBS This course has a Prerequisite: YES

Time: MW 01:00PM-03:50PM

Location: CSC 3-PHYS

NS-0212-1 **Organic Chemistry I**

Professor: Rayane Moreira

This course is an introduction to the structure, properties,, reactivity, and spectroscopy of organic

molecules, as well, as their significance in our daily lives. We will first lay, down the groundwork for the course, covering bonding,, physical properties of organic compounds, stereochemistry,, and kinetics and thermodynamics of organic reactions. We, will then move on to the reactions of alkanes, alkyl, halides, alcohols and ethers, alkenes, and alkynes,, emphasizing the molecular mechanisms that allow us to, predict and understand chemical behavior. Additionally, we, will discuss the identification of compounds by mass, spectrometry, NMR and infrared spectroscopy. Student-led, presentations will address the role organic molecules play, in biology, industry, society, and the environment. Regular , problem-solving sessions will be held to foster skill in, mechanistic and synthetic thinking. The laboratory will, provide an introduction to the preparation, purification,, and identification of organic molecules. Prerequisite: high, school chemistry.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MWF 10:30AM-11:50AM F 01:00PM-06:00PM

Location: CSC 101, CSC 101

NS-0214-1 **Ecological Soundscapes**

Professor: Blair McLaughlin

This course will explore the bridge between music and ecology, drawing from the fields of ecological sound art, eco-musicology,, acoustic ecology and soundscape ecology. Using primary, literature, mixed media and deep listening, we will address the, ways that sound functions in the ecological environment, and the, ways sound and music can be used to represent ecological and, conservation issues. We will consider how the landscape is, organized and transformed by sound, how noise pollution and, changes in soundscapes are impacting ecosystems, organisms and, human health, and how sound art and soundscape composition can, enhance understanding of the natural environment and address, environmental problems. Students will conduct their own field, recordings and create their own compositions, engage in listening, and discussion sessions and participate in field trips on local, sound environments. For final projects students may choose to, focus on creative or ecological science-based work. , Prerequisites: a strong interest in music and ecology. Walking in, variable terrain and weather may be required.

Instructor Permission: NO Satisfies Distribution: PBS This course has a Prerequisite: NO

Time: MW 02:30PM-03:50PM

Location: EDH 5

NS-0243-1 **Physics and Metaphysics**

Professor: Kaca Bradonjic, Christoph Cox

What are the basic features of reality? Where and when do, these things exist? How and why do they change? This course, will explore the ways that physicists and philosophers have, answered these

questions and have dealt with reconciling, incompatible perspectives. Students will engage these, questions through reading, writing, observation,, mathematical problem-solving, art-making, and active, discussion. We will use high school algebra and graphs to, understand the fundamentals of Einstein's special theory of, relativity and quantum mechanics; and we will consider, philosophical theories about the nature of reality, time,, space, and change through texts by Western and non-Western, philosophers. Along the way, we will ask: How do we decide, what is real? Does observation take precedence over theory, (or vice versa)? What role do models and imagination play in, this inquiry? What are the structures of authority that, legitimize scientific and philosophical claims? No prior, exposure to physics or philosophy is required.

Instructor Permission: NO Satisfies Distribution: CHL, PBS This course has a Prerequisite: NO

Time: MW 04:00PM-05:20PM

Location: EDH 2

NS-0257-1 **Human Physiology**

Professor: Cynthia Gill

With humans as our primary model system, we will cover, cellular and general tissue physiology and the endocrine,, nervous, muscular, cardiovascular, reproductive,, respiratory, and renal organ systems. Primary emphasis is on, functional processes in these systems. A focus will be on, cellular and molecular mechanisms common across systems., Students will engage in class problems, lectures, and, reading of textbook literature. Basic knowledge of and, comfort with biology, chemistry and math is necessary.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 09:00AM-10:20AM

Location: CSC 333

NS-0258-1 **Cell Biology**

Professor: John Castorino

The structures and processes inside human cells determine, how we function (or dysfunction) in the world, and yet they, were only discovered in the last few hundred years. We will, discover what is known about how they work through primary, literature, group work, and laboratory exercises. We will, also discuss what is still not known and how scientists work, to find the answers. This course is designed with an active, learning approach, so students should come prepared to learn, a lot of the content through independent activities rather, than lectures or textbooks.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MWF 09:00AM-10:20AM MWF 09:00AM-10:20AM

Location: CSC 2-OPEN, CSC 2-OPEN

NS-0262-1 **Biochemistry**

Professor: John Castorino

Biochemistry is the study of the molecules and chemical, reactions of life. Considering the vast diversity of living, organisms, one might also expect them to be composed of, significantly different biomolecules, and to use unique, mechanisms for obtaining energy and communicating different, biological information. To the contrary, the principles and, language of biochemistry are common to all life: in general,, the same chemical compounds and the same metabolic processes, found in bacteria exist in organisms as distantly related as, whales. Topics will include the structure and function of, proteins and carbohydrates, metabolism and bioenergetics, within the context of cells. Most topics will be explored, in conjunction with laboratory work. Students enrolling in, this course must also enroll in Cell Biology (NS-258).

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: YES

Time: MWF 10:30AM-11:50AM MWF 10:30AM-11:50AM

Location: CSC 2-OPEN, CSC 2-OPEN

NS-0265-1 **Statistics**

Professor: Elizabeth Conlisk

This course is an introduction to descriptive and, inferential statistics with examples drawn primarily from, the fields of medicine, public health, and ecology. The, approach is applied and hands-on; students are expected to, complete two problem sets each week, collect and analyze, data as a class, and design and carry out their own examples, of each analysis in four review exercises. We cover, description, estimation and hypothesis testing (z-scores,, t-tests, chi-square, correlation, regression, and analysis, of variance). More advanced techniques such as multi-way, ANOVA and multiple regression are noted but not covered in, detail. We also discuss the role of statistics in causal, inference though the emphasis of the course is on practical, applications in design and analysis. The course text is The, Basic Practice of Statistics by David S. Moore; students use, the statistical package Minitab to conduct data analyses.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM

Location: CSC 316

NS-0266-1 **Research Methods Microbiology**

Professor: Jason Tor

In this laboratory-based microbiology course students will, develop the skills necessary to conduct a meaningful, research project from start to finish. Students will gain, hands-on experience with media

formulation, culturing, techniques, and phylogenetic analysis. In the process,, students will discover a vast microbial community and, possibly previously unknown species.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: W 01:00PM-05:00PM W 01:00PM-05:00PM

Location: CSC 2-OPEN, CSC 2-OPEN

NS-0290-1 **Food Microbiology**

Professor: Jason Tor

Microorganisms are ubiquitous components of food from farm, to fork. As public interest in probiotics and fermented, foods grows, as well as concerns over food safety and, quality mount, the potential effects of food microbiology on, human health and wellbeing are profound. Ensuring the future, of food safety and quality will require critical thinking,, innovative research approaches, and healthy skepticism., Students will have the opportunity to foster those skills, while studying the foundations of microbial growth and the, role of beneficial microorganisms in food fermentation, and, discussions about spoilage and the occurrence of pathogenic, microorganisms in our food system.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 02:30PM-03:50PM T 05:30PM-09:30PM

Location: CSC 2-OPEN, CSC 2-OPEN

NS-0293-1 **Molecular Ecology**

Professor: Charles Ross

Molecular ecology utilizes the spatial and temporal, distribution of molecular genetic markers to ask questions, about the ecology, evolution, behavior, and conservation of, organisms. This science may utilize genetic variation to, understand individuals, populations, and species as a whole, ("How does habitat fragmentation affect connectedness among, populations?" "From where do particular groups originate?")., Similarly, genetic patterns may reveal information about, interactions of organisms ("How much interbreeding occurs, among populations?" "How monogamous or promiscuous are, individuals?"). Molecular ecologists also utilize specific, genes to investigate how organisms respond and adapt to, their environments ("How do genetically modified organisms, escape into natural environments?"). We will read background, and primary literature in this field to understand how, molecular ecology can answer basic and applied questions, about organisms. Students will research specific, applications of this discipline and present their findings, in written and oral format. Some knowledge of biology will, be assumed.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 10:30AM-11:50AM

Location: CSC 2-OPEN

NS-0341-1 Pattern and Color in Life

Professor: Charles Ross

Pattern and Color in Life: Natural organisms provide an, unparalleled palette for almost every color and pattern, imaginable. Why do organisms have stripes and spots? Why, blue or red? This course will explore how and why various, colors and patterns are produced in the biological world. We, will investigate biochemical, genetic (and epigenetic),, developmental, and environmental mechanisms as well as, simple mathematical models to explain their production., Additionally, we will link patterns/colors to their, functions, such as defense, warning, camouflage,, communication, mate attraction, etc. We will use both, applied and primary scientific research literature to, explore topics in these areas. Semester long research, projects will be components of this course. Students will, research specific aspects or questions and present their, findings in written and oral format.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: CSC 316

NS-0365-1 NS Division III Seminar

Professor: Christina Cianfrani

This seminar is designed for Division III students studying, topics in all fields of the natural sciences and Division II, students interested in designing and completing independent, projects. We will use a workshop format to critically read, each other's work and provide constructive feedback and, suggestions. We will also cover topics such as:, communicating science in a variety of formats, data, presentation and analysis, writing abstracts, citing, sources, etc. Specific content will be dictated by student, interests. Each student will lead a discussion about their, research project and provide background materials to inform, the discussion including primary research articles, writing, excerpts from their projects (project proposals, Division, III chapters, etc.). At the end of the semester, each, student will give a final presentation of their work and, receive feedback on their presentation. The seminar will, provide a collaborative environment for students working, independently on research projects.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: TTH 01:00PM-02:20PM

Location: CSC 102

NS-386I-1 New Ways of Knowing

Professor: Herbert Bernstein

If Science is not purely objective and art not just for "Art's sake" what are we to do? From energy systems, to economic crises,, to protection against terrorists; from supplying new food, organisms, to drone warfare in the Middle East, to exploring, meaning with all kinds of creative human endeavors, our modern, society turns to the arts & sciences for solutions. But the, sciences also proliferate side effects - - ranging from toxic, military pollution, through unforeseen biological disruption, to, global warming and political backlash. Do we need "new ways of, knowing" to address the personal/political problem of combining, disciplinary excellence for social good? Participants study, reconstructive knowledge and APPLY it to their own work. We will, together develop the reading list, and update it: we read the, instructor's two books and those of Foucault, Keller, etc., to, help reconstruct what we each DO as knowledge workers -- our, projects, concentrations and theses. The real-world efforts at, The Institute for Science and Interdisciplinary Study help launch, discussion of our own work. This course has remarkable effects on, divisional work, graduate school, even professional lives beyond., Opportunity to help Update course readings, including the newer, Institute effort towards compassionate knowledge will occur in, Fall'19 as preparation.

Instructor Permission: NO Satisfies Distribution: This course has a Prerequisite: NO

Time: T 02:30PM-05:20PM

Location: CSC 3-PHYS