



First-Year Seminar Course Descriptions

2021-2022

www.du.edu/fsem

Below are the course descriptions, alphabetically ordered by faculty last name. All incoming First-Year students are required to register for a First-Year Seminar online during summer registration (the week of **July 19 - 23, 2021**). You will register for **ONE** First-Year Seminar course. Classes fill quickly, so have a few FSEMs in mind that you are interested in taking. Be sure to look at course conflicts to avoid FSEMs that conflict with major requirements and athletics practices.

updated July 6, 2021

Mathematics of Gambling and the Nature of Randomness

Instructor: Alvaro Arias, aarias@du.edu

Course Description: In this course students learn to program in Python and they use it to simulate probability situations and games of chance. The course starts with an introduction to logic. We start with truth tables using the connectives (not, and, or, if ..., then ...) that are essential in mathematics and computer sciences. After this we define arguments and learn to write formal proofs in logic or mathematics. The math part continues with a rigorous study of counting. This requires only arithmetic of whole numbers (5th grade mathematics) but the problems can be difficult and require critical thinking. Counting is the basis of finite mathematics and probability, and it is studied by math, CS, and engineering majors starting in the sophomore year. We use counting to define probability. In the meantime, students learn programing and they use this skill to do simulations and they learn to answer probability questions using them. The second half of the class is more focused on simulation problems, and students will also learn to use some of powerful Python libraries to visualize the data. In particular they will use Pandas, which is like Excel on steroids, and Matplotlib, which is a graphing library similar to Matlab.

The Strange World of Quantum Physics and How It Affects YOU Every Day

Instructor: Davor Balzar, Davor.Balzar@du.edu

Course Description: End of the World in 2012 caused by solar neutrinos? It didn't happen. A cat is both dead and alive, an electron is both a particle and a wave, and a message that instantaneously propagates across the universe? Reality or fiction? It is true and the basis of many things that we use and encounter every day. From nuclear weapons and laser-guided bombs to "iGadgets" and computers, they exist because of the laws of quantum physics. The seminar will overview basic principles of quantum mechanics, the new area of physics that was born in 1900 by the Max Planck's postulate about the discrete nature of energy and developed mainly in the first part of the 20th century by Albert Einstein and other giants of the 20th century physics. Brilliant theories have later led to the inventions of a laser, GPS, computer, atomic clock, blue-ray player, smartphone, iPod, nanotechnology, and other things that we depend on every day. In a not-so-distant future we

will get quantum computers that will dwarf existing machines in both power and speed. Possibilities are endless and are likely to make science fiction from Dick Tracy cartoons to Star Trek movies look not too imaginative. We will critically explore these fascinating topics through group discussions and term papers.

Seeking Beauty

Instructor: Rick Barbour, frederic.barbour@du.edu

Course Description: “If we ignore the need of beauty, we find ourselves in a spiritual desert.” - Roger Scruton Beauty matters. It integrates the unique and the universal, our most disparate selves. In Seeking Beauty, students will share their transformative, cathartic, and epiphanic experiences of beauty discovered through encounters with Music, Architecture, Movies, Craft, Nature, Painting, Sculpture, Photography, Dance, Athletics, Literature, and Poetry. Students will develop and present multiple solo performances that vividly communicate the visceral experience, essence, and immediacy of those encounters through intimate first-person spoken stories supported by visual and aural elements. The course aims to encourage and reward the ongoing practice of seeking beauty in the world, of opening oneself to the experience of truth, awe, wonder, and transcendence, and to equally encourage and reward the sharing of those experiences in honest and soulful ways with their peers.

With and Without Nature

Instructor: Brad Benz, bradley.benz@du.edu

Course description: Jim Harrison states that “to say ‘nature writing’ is to say water swimming.” His point? Humans are nature, too. Using sustainability and interconnectedness as organizing principles, this FSEM explores the natural world, asking students to examine humanity’s position with, against, and without nature. Students will read as eco-critics and write as green rhetors. The substantial reading list will include at least two books, and numerous short stories, poems, essays, and films. Students will also conduct regular field trips by studying a local outdoor green space, one they will visit regularly, researching the site in a hands-on manner, and recording their findings in a lengthy writing project – a multimedia naturalist’s site journal. The site journal will ask students to study their site from a number of perspectives, including ones they may not already be familiar with (for example, historical, eco-feminist, and scientific).

Geographies of Metropolitan Denver

Instructor: Eric Boschmann, eric.boschmann@du.edu

Course description: Denver, Colorado is a major U.S. urban center in the western Great Plains and Rocky Mountain region. Today it is a flourishing city, with a growing population, a strong and diverse economy, an enviable climate, and a balance of proximity to rugged mountain landscapes and many urban amenities. The urban region also faces many challenges, including negative impacts of rapid growth, water scarcity, social segregation, economic inequalities, and environmental degradation. This FSEM course explores a contemporary understanding of Denver as a New West city that is informed by its Old West history and evolution through the processes of urban growth and change. Particular emphasis is given to a geographic perspective of historic, economic, political, cultural, and environmental factors that have shaped Denver over time. Through in-class activities, fieldtrips, and comparative urban analysis, students will develop their academic skills in reading, writing, researching, and effective communication of ideas. This course

is an opportunity for students to become more knowledgeable about the city they will call home during their college career.

Investigating the Natural World Through Documentary Film

Instructor: Joe Brown, joe.brown@du.edu

Course description: "Investigating the Natural World Through Documentary Film" is a course that combines critical inquiry with active storytelling through the examination of film texts and the creation of film stories. The course focuses on three basic themes. 1.) Developing a sense of place through storytelling; 2.) Becoming an active participant in one's community; and 3.) Developing media literacy through the examination of popular environmental media. Particular emphasis is given to documentary film research, current environmental debates, and filmmaking technology. Through in-class exercises, field trips, and reasoned debate, students will develop academic and life skills in reading, writing, research, persuasion, and the creation of media texts. This course is an opportunity for students to further develop their environmental awareness while becoming storytellers in their own right.

Science at the boundary: A look into the nanoworld

Instructor: Maria Calbi, mcalbi@du.edu

Course description: In 1959, the physicist Richard Feynman brilliantly anticipated the emergence of nanotechnology in his famous lecture "There is plenty of room at the bottom". Our knowledge of the laws of physics was already enough then to support this revolution and, as expected, it surely found its way; today, we are able to manipulate matter at atomic scale and many devices have been built thanks to this technological ability. But as it happens with any emergent field, many questions and challenges (from basic science to technological applications and philosophical implications) continue to surface. This seminar will explore some of the topics related to nanoscience with two main goals: 1) to emphasize the physics laws behind the unique behavior exhibited by very small systems and their surprising consequences on our every day lives, and 2) to reflect on how these strange physics laws came to be by looking at the history of the quantum revolution from the broader perspective of human creativity.

Athens and Beijing: Two Worlds or One?

Instructor: Victor Castellani, vcastell@du.edu

Course description: China is self-evidently important to everyone now alive. Today it's poised to become the dominant world power, while old ex-imperial Europe seems in clear decline—like or unlike the USA? We may understand such trends by exploring different nations' inherited thinking. We'll contrast ideals formed during ancient "Classical" eras East and West, then compare those of revolutionary movements of the 18th century in rebellious British colonies and France, in 20th-century China. How do respective heirs of ancient Chinese and Greeks resolve evolving, conflicting claims of individual and society, of family and state? Weigh personal liberty and innovation against social order and stability? What contrasted values brought our ancestors to think as they did about virtues of subjects/citizens and of government? How has each civilization defined justice? Social justice? How does it today? We study ancient texts from historians and political theorists, modern narratives and primary documents. For class you will not confront mere facts. Be prepared to think and feel yourselves into heads and hearts of imagined persons, quite unlike you in beliefs and values: one who lived millennia ago; witnesses to modern revolutions that

produced contrasting versions of “republic” and “democracy”; and contemporaries during serial crises of our 2020s.

The Right to Health in Theory and Practice

Instructor: Alejandro Cerón Valdes, Alejandro.CeronValdes@du.edu

Course description: This course is an introduction to the “right to health.” It asks, “Is health a human right? And if so, what does that mean?” We will use film and literature to explore ideas and behaviors around health and health care. We will learn about the right to health through the reading of core documents that define it and academic and activist articles that explain it. We will contrast theory and practice through discussions, reflections and a problem-based project in partnership with a community organization. This course includes a “service-learning” component that consists on volunteering with Casa de Paz, an Aurora, Colorado non-profit organization that offers support to migrants recently released from detention. More information on the specifics of the service learning will be given in class. However, there are a few things to note about your service learning commitment: It requires a significant time commitment—approximately 12-16 hours over the course of the quarter—spent outside of the classroom. To accommodate this time commitment, please note that the amount of reading and formal writing for the course have been reduced. If you are unable to meet this requirement, you should not enroll in the course.

Fracturing Fairy Tales: A 4D FSEM

Instructor: April Chapman-Ludwig, April.Chapman-Ludwig@du.edu

Course description: In this section of FSEM we focus on the historical, political, and social underpinnings of fairy tales and their adaptations: Fairy tales help us understand that the values of once upon a time aren’t so different from our values now. To draw out these values, this course is designed to examine the rhetorical and ideological changes grafted onto different adaptations of classic fairy tales. We will focus on addressing each tale’s re-telling as historically and culturally bound, investigating the layers of meaning related to gender and familial relationships, class structure, and sexuality. To do this we will focus on three main fairytales, each looking at multiple renderings through different mediums (e.g., artwork, movie, and music, etc.), and then apply theoretical lenses to examine these adaptations. This course will also focus on four student dimensions (4D): personal and professional development, physical and emotional well-being, personal values and character; and intellectual growth. As part of this experience, students will map and explore their educational journeys—cultivating relationships and integrating learning across classes while participating in out-of-class events and activities. By studying the values that underwrite fairytales and examining their connections to other stories, students will learn more about their own lives through the representation of cultural artifacts and primary social mores.

Bathrooms as Political Spaces: A 4D FSEM

Instructor: Sara Chatfield, sara.chatfield@du.edu

Course description: Bathrooms have been the site of intense political struggle throughout American history. Americans have clashed over racially segregated bathrooms, equal space for women, a right to rest breaks at work, toilets that are accessible for people with disabilities, and safe access for transgender individuals. In this class, we’ll explore bathrooms as political spaces through academic and popular readings, films, informal and formal writing, short lectures, in-class discussion, guest speakers, self-reflection, and collaborative work. As a 4D FSEM, this course

will combine academic content and intellectual growth with character development, personal well-being, and career readiness. You'll have opportunities to engage in these dimensions both inside and outside of class as part of a larger 4D community at DU.

EDUCATION FOR ALL? Opportunities and Outcomes in the United States

Instructor: Paula Cole, paula.cole@du.edu

Course description: In today's economy, education is often hallmarked as the path to economic success. Does more education result in better economic outcomes? Should everyone have access to higher education? Who should pay the costs of college? How does education facilitate our economic system? This service-learning course examines conflicts, disparities, and solutions in accessing educational opportunities within the United States. We will evaluate the benefits and costs of a college education and how they are distributed across individuals and communities. Additionally, we will critically explore the purpose of learning within our economic system. Finally, our service-learning partnership will give us first-hand experience with economic and social inequalities within Denver and how these inequalities change educational opportunities and outcomes.

Transnational justice and the boundaries of rights

Instructor: Lisa Conant, conant@du.edu

Course description: The Second World War, totalitarianism, and atrocities inspired Europeans to pursue peace, democracy, and human rights in the Council of Europe and its European Convention on Human Rights (ECHR) and European Court of Human Rights (ECtHR). Responding to the same humanitarian crises of the mid-20th Century, the Geneva Convention for Refugees (1951) protected individuals from return to home countries if they feared persecution. Today Europeans living in (mostly) liberal democracies make the ECtHR the world's most active international court with jurisdiction over 47 countries, including all 27 European Union (EU) member states, where an EU Charter of Fundamental Rights and European Court of Justice (ECJ) provide further protections. Yet war and atrocities persist along Europe's margins and in surrounding regions while international law never provided individuals fleeing abuses the right to enter states. Here we (1) explore the extent to which human rights protection within Europe coincides with egregious abuses on its doorstep and (2) reflect on the boundaries of our obligation to pursue transnational justice. We ask what explains the rise of transnational justice institutions in Europe? What justifies the pursuit of transnational justice? Who is included and excluded, and why?

Anthropology and Archaeology of Denver

Instructor: Lawrence Conyers, lconyers@du.edu

Course description: The Denver area has a great diversity of resources on anthropology and archaeology, which we will learn from in this seminar. We will visit the Denver Art Museum and the Denver Museum of Nature and Science, which contain collections from Central America and ancient humans in Colorado. We will also be visiting an archaeological site south of town, which we have excavated a few years ago, containing remains of hunters and gatherers from about 3,500 years ago. In addition, we will study some historic buildings in downtown as a dataset from which to look at inclusiveness-exclusiveness in public architecture. The last of our field projects will be a study of the oldest cemetery in Denver, which contains burials from the first governors of

Colorado, the founder of University of Denver, and many other important and less important people.

Queer Literature: Memoir, Narrative, and Autofiction

Instructor: Patrick Cottrell, patrick.cottrell@du.edu

Course description: Queer literature is currently going through a transition. In the last ten years, numerous works of queer literature have entered mainstream conversations, for example, most recently *Detransition, Baby* by Torrey Peters and *On Earth We're Briefly Gorgeous* by Ocean Vuong, among many others. This course will survey the landscape of contemporary queer literature with an emphasis on writers who write about themselves through memoir and autofiction. What does the word "queer" mean and who is it for? Why is storytelling important to queer writers? Can a work of literature be considered queer if the author does not identify as queer? We will explore these questions by engaging with contemporary writers like Alison Bechdel, Alexander Chee, and Justin Torres. This class will include creative activities like 'zine-making, collaging, and workshopping our own stories. The result of this creative and critical approach will be a vital examination of the intersections of gender, race, class, and what it means to be queer in today's world.

Poetry and the Public

Instructor: David Daniels, ddaniel4@du.edu

Course description: Don't let the term 'poetry' intimidate you. This seminar looks at hip hop, Bob Dylan, the Beat Generation, the Black Arts Movement, poetry slams, and the Harlem Renaissance, in other words, poets who shaped popular culture and didn't write for school settings. These are the poets, like Amanda Gorman at President Biden's inauguration, who actually reached out and touched the public. Throughout the quarter, we will consider how different poetry movements responded to mainstream culture, often critically, and shaped countercultures themselves.

The Rediscovery of Experience: The World Beyond Our Screens

Instructor: Jared Del Rosso, jared.delrosso@du.edu

Course description: Today, it seems like everything aspires to binge-worthiness, all the better to keep us tethered to our devices. Our politics consists of soundbites, tweets, and endless scandals. Our social life is measured in texts, likes, and followers. Our economy, meanwhile, is clickbait, viral videos, and NFTs. How did we get here? And what can we do to resist the pull of our screens? In this FSEM, we'll learn about the economic, technological, and social foundations of the attention economy. We'll also learn to resist its force, by observing nature, engaging in self-reflection, and woolgathering (engaging in idle daydreaming). In pursuit of this learning, this course uses learner-centered and active learning strategies to encourage personal and collective reflection on our lives on and off screens. You should expect a mix of short lectures, structured and unstructured discussions, and collaborative learning activities; you should also expect to work together to develop some of these for us. Assignments support reflective, creative, and sociological analysis by asking students to apply what they're learning to personal experiences and contemporary society.

History of Animation: Critical Watching and Critical Making

Instructor: William Depper, william.depper@du.edu

Course description: For over a century animation has thrived as a film-based art form and method of expression. It has become an important and prevalent part of our popular culture. By learning to critically watch animation through a variety of theoretical lens we can see the influences it has had upon our culture. We can examine changes that have occurred in the form and nature of the art form in response to the cultures and circumstances within which it was created. By creating simple forms of animation, we can further our understanding of the processes involved as well as explore ideas through a process of critical making. Students in this class will use readings, screenings, and written responses to investigate introductory critical theory, animation history, and basic film theory. Their findings will be used in a series of short animation exercises to explore how these ideas can be used to inform their making. Digital tools will be used to aid in the creation and editing of these short animations.

Magic, Metamorphosis, and the Artistic Imagination

Instructor: Polina Dimova, polina.dimova@du.edu

Course description: What is magic and how can it transform the world? This course explores our fascination with magic as supernatural power, superstition, carnivalesque playfulness, and Romantic imagination in Russia and the West. Students will read texts that take magic and divinities for granted, explain the world by means of metamorphosis, and present fantastic events as political allegories. We will discuss stories, novels, poems, fairy tales, and art across cultures and time that lend storytelling, love and death, art and history, and dreams and nature the magical power of transformation. By examining the captivating metamorphoses in the works of Baudelaire, Bulgakov, Gogol, Kafka, Ovid, Rilke, and Tsvetaeva, we will inquire into notions of identity, corporeality, power, censorship, and resistance.

Studying Moral Lives

Instructor: Sandra Dixon, sdixon@du.edu

Course description: The course draws students into several interrelated questions: How do people live moral lives? How can we study those lives? How can we contribute to a good life for each other and people around us by drawing on our experience of struggle in the pandemic, in racial reckoning, in economic hardship? From the beginning of the quarter we read social scientists' writing on how morality develops in people's lives. Discussing in small groups and making visual images of the major ideas help students meet the challenge of understanding articles published in academic journals. Over the quarter the articles address the experience of more genders, races, social classes, and ages. A research librarian teaches students to find academic sources to write a short biographical paper on a civil rights leader that they later interpret using a theory from the readings. Students contribute small postings to a website that shows their own efforts to live a life that they could recommend to others during the pandemic. It is a record for the future, encouragement for one another, and a chance to use the course's ideas to think about the students' own lives. A reflection paper on course readings concludes the quarter.

Finding Feminism in the 21st Century

Instructor: Lindsey Feitz, lindsey.feitz@du.edu

Course description: In the 21st century, we might imagine that many of the trials and issues facing the women of yesterday have been left behind allowing feminism to move productively forward. But ... has it? What does feminism mean today and how has the past helped define the future? What does it look like to be a feminist today? To answer these questions and more, we will watch, read, debate, and reflect over the history of U.S. feminism(s). We will also attempt to define feminism in the 21st century. Throughout the quarter, we will put theory into practice as we also explore 21st century feminisms and its intersections with contemporary social movements as we attempt to what does it mean to be a feminist at the University of Denver?

Exploring the Ocean

Instructor: Jim Fogleman, fogleman@du.edu

Course description: We probably know less about what is under the surface of the ocean than we do about any other aspect of our planet. This course presents the techniques used to explore under the ocean surface from the beginning of recorded history, through the major developments in underwater technology, to the present. In the last 50 years, there has been a substantial increase in technology as well as a significant increase in public interest. This includes not only recreational scuba diving, but hard-hat (commercial) diving, free diving, and deep-water submersibles. The course also presents the human physiology associated with each technology. In addition, of the course presents aspects of environmental issues. Ocean conservation issues include ocean warming and acidification (and their impact on marine life), the global decline of coral reefs, overfishing, the near extinction of large whales, shark finning, the effect of coastal recreation, pollution, the development and economy of marine parks, ecotourism, and deep-water drilling for oil, among others. This seminar will not only capture student's interest but educate them relative to marine environmental issues on a global scale and provide them with opportunities to make informed decisions about their future and the future of the oceans.

Hierarchies and Concepts

Instructor: Nick Galatos, ngalatos@du.edu

Course description: The notion of a concept is fundamental to all academic disciplines. In this course we will provide a mathematical study of formal concepts that will be based on our intuitive understanding of hierarchical orderings. Given a set of objects, say planets, and a set of attributes, say 'far from the sun' or 'big', we can construct a table/database with rows the objects and columns the attributes; in this table we mark, for example, the box that is in the row 'Jupiter' and in the column 'big'. If the table is large, it is hard to extract directly any useful information. We will describe a method to present the information in the table in a diagrammatic and visually appealing way that may then be used in drawing conclusions and making decisions about the 'raw' data in the table. The mathematical diagram that we construct is called a lattice and is simply a hierarchical ordering with nice properties. After studying the mathematical theory of lattices and hierarchies in general, we will subsequently apply it to study concepts in various areas, referring to examples in the social and natural sciences. For example, objects can be music composers and attributes can be genres of music. Every class meeting will consist of a mix of lecturing and group work, experimentation with lattice-drawing software, discussion and student presentations. Although the

course has absolutely no prerequisites, we will introduce and use mathematical symbolism and provide formal justifications for our claims. Apart from learning how concepts can be represented in a visual way and analyzed mathematically, the students will be exposed to formal and precise reasoning that avoids numerical computations.

Naming Matters: Discrimination, Identity, and the Power of Names

Instructor: Kathleen Guerra, kathleen.guerra@du.edu

Course description: This course is designed to raise awareness and critically examine issues of linguistic discrimination: where, how, and why certain associations are developed and maintained in proper names, everyday expressions, and the media. By starting with an investigation and reflection on our own proper names, where they come from and how they represent us, students will consider the strong link between names and identities. From this point of departure, we will examine how other proper names specifically and naming in general can position and negotiate different aspects of identity and power. Through readings, reflections and class discussions, students will develop strategies for identifying, examining, and counteracting problematic language practices. We will examine discourse around names, naming, and expressions of identity, including associations of gender, sexual orientation, accents, race, and symbols.

The course will include short lectures, presentations, small and large group discussions, and a cumulative, multi-genre final project and reflection. In acknowledgment of the new demands of the university experience, we will also explicitly examine other aspects of the classroom expectations to complement course topics. Each week we will address different skills, such as expressing an opinion on an emotional topic, responding respectfully, emailing professors, and reading academic articles, with the purpose socializing students to other academic expectations. As a final cumulative assignment, students will work towards the development of a multi-genre project with measurable goals to address perceptions of naming and other discriminatory language practices in their communities. This project that may include designing a poster, creating a video, blog post, etc., in addition to a formal write up concerning the logic, scope and desired outcome of the project.

Colorado's Rivers

Instructor: Hillary Hamann, hhamann@du.edu

Course description: Colorado has often been called the “Headwaters State” as 4 major U.S. Rivers—the Colorado, Rio Grande, Arkansas, & South Platte--begin in the Colorado mountains (more than in any other state). These rivers may appear as pristine mountain streams, but the history of Colorado’s human development has had serious impacts on the water quantity and quality as well as on the form and ecological functioning of our river resources. For example, mining that began in the 1850’s in Colorado left a legacy of 1300 miles of streams still affected by heavy metal contamination from more than 23,000 abandoned mines. With growing population and changing priorities, the future of Colorado’s rivers is uncertain. In this course we will use a combination of readings, discussions, films and field excursions to critically examine past and present impacts to Colorado’s rivers including: mining, water transfers, flow regulation, logging, wildfires, agriculture, recreation, population growth and climate change. For each impact, we’ll consider how to lead our rivers to a sustainable future through restoration and management that will balance ecological, hydrological and human needs. Throughout the quarter, we will focus on

developing skills and practices in an active learning environment that will help you to succeed as university students.

Environmental Change and Human Health

Instructor: Helen Hazen, Helen.hazen@du.edu

Course description: Health and environmental issues are constantly in the news: What contributed to the COVID-19 pandemic? Why did Zika suddenly spread through Latin America in 2015? What impacts will climate change have on people? Increasingly, issues of environment and health are being linked, with more and more evidence emerging to suggest that human disruptions to the natural environment carry significant health implications: climate change is changing the range of mosquitos that carry infectious diseases like malaria; deforestation and settlement of wildlands is exposing humans to animal pathogens such as the virus that causes Ebola; pollution causes thousands of premature deaths every year; loss of wildlands may even be having an impact on our mental health. In this class, we take the ideas of health and sustainability as starting points to explore the many ways in which environmental change is influencing disease patterns. We will explore population change, emerging infectious diseases, biodiversity loss, agriculture, climate change, pollution, and the physical and mental health impacts of our increasingly urbanized lifestyles. As we explore this thematic material, we will spend time developing some of the core skills needed to succeed at the college level, including reading, writing, data interpretation, and presentation skills.

Art and Observation in Health Care

Instructor: Jennifer Hellier, Jennifer.Hellier@du.edu

Course description: Art is everywhere, even in health care, and being observant is a must for understanding art and treating a person. In today's healthcare scene, it is imperative for all providers from nurses to physicians to dentists to effectively communicate and connect with patients. Such a focus will improve a patient's trust in the provider and of the healthcare system. This means learning how to read body language, discerning the difference between description and interpretation, and being open to identifying one's own biases and perceptions of cultural, ethnicity, age, and gender contexts. Thus, this course focuses on developing observational skills through the appreciation of fine and contemporary art, videos, photography, and everyday interactions. We will visit museums and an arboretum and create our own art. This course will provide students not only the insight about the scientific basis of health care, but also the social and cultural contexts of human health that make up the art of medicine. In addition, students will learn to employ critical skills and competencies necessary for understanding and evaluating patient-provider interactions in health care situations, as well as to identify and learn how to observe and interact with others using a diverse, equitable, and inclusive lens.

Sounds of Afrofuturism

Instructor: Matthew Hill, matthew.a.hill@du.edu

Course description: The future is (mostly) uncertain. We (sometimes) know this. We often seem less certain that our pasts and presents are just as uncertain, but humans tend to desire and perhaps need a singular, cohesive story to explain our worlds. I invite you in this course to examine Afrofuturism as one way to revise the world and its histories through the sonic imaginary. We won't limit ourselves solely to the sonic (in fact the first few weeks won't specifically address the

sonic), but the sonic imaginary will be our main mode of thinking and creating in the second half of our course. What I ask you to balance through our course is how we make meaning through both the textual (readings) and the textural (listenings, visuals, food, etc.). This latter distinction is one of convenience and will not cover all our bases. An evolving Apple Music list is found on Canvas. I encourage you all to add to it over the quarter. Further this course will be exploratory in nature and allow you to think about texts and sounds in ways you may not have before. Please be open to these new experiences as they may feel strange at first.

The Soundtrack of a Revolution: Popular Music of the Civil Rights Movement

Instructor: Roger Holland, Roger.Holland@du.edu

Course description: Music has often been used as a vehicle to express thought and emotion, as well as an agent for change. An examination of the Negro Spirituals will show this to be true. In this course, students will examine the music of popular culture and its response to the social climate of the 1960s and 1970s as the United States wrestled with its conscious on the issues of civil rights, justice and equality. With a particular focus on the life and music of Nina Simone, we will closely examine the events in history that sparked outrage and response from musicians, who in turn sought to influence a change of heart and legislation in the land of the free and home of the brave.

The Science of Science Fiction

Instructor: Scott Horowitz, scott.horowitz@du.edu

Course description: Science fiction is the medium through which humans imagine the future, enabling us to extrapolate and envision different trajectories for our world, as well as examine the problems facing our society today. The science component of science fiction is a critical piece that enables this examination, as well as providing a method for conceptualizing new technology and advancing science. This FSEM course delves into the genre of science fiction from the perspective of the science. We will examine the role of science fiction in science and society and study the science of the present and future through the interdisciplinary lens of science fiction, including film and literature. Topics will be weighted towards the science and science fiction of biology (such as genetic manipulation) and chemistry (such as advanced materials) but will also cover topics within physics and computation. Through creative science fiction and analytical science writing, in-class discussions, independent research, presentations, and participation at a science fiction conference, students will develop critical thinking, writing, and communication skills. In addition, this course will devote time to students' academic and professional development. Students will prepare for their academic future as well as learn strategies for networking and advancement in their field.

Shakespeare's Americas

Instructor: W. Scott Howard, showard@du.edu

Course description: How and why has Shakespeare's legacy become entangled in our country's national and international culture wars? We will investigate Shakespeare on the page, stage, and screen, connecting the plays and their source materials, their adaptations and performances to history and politics during Shakespeare's times and ours. We will study four plays—*The Tempest*, *Julius Caesar*, *Hamlet*, and *King Lear*—as we examine Shakespeare's contested legacy from England to Africa, the Caribbean, South America and the USA at the intersections of colonialism, postcolonialism, racial justice, gender and sexuality. Our work engages with an international and

interdisciplinary field from the early modern to the modern & postmodern eras, following routes of travel, translation, and trade. We will pay special attention to the role of the First Folio in transnational democracy and dissent, the archival interventions of artist books, and the agency of Shakespearean texts, performances, and adaptations across media encountered as forms of resistance against systemic violence. Students will work individually and collectively on research projects that combine creativity and critique. This seminar will provide individualized academic advising as part of a robust introduction to campus resources and the intellectual community at DU and in Denver.

Physics for Future Presidents

Instructor: Steve Iona, siona@du.edu

Course description: Many topics of social and political importance are directly related to science in general and physics in particular. This course will address basic physics concepts and knowledge so that these issues can be understood and discussed in a meaningful way from a scientific point of view. We will cover a wide range of physics topics such as energy, atoms, radioactivity, chain reactions, electricity, magnetism, space travel, and climate. The use of basic algebra, graphical interpretation, mathematical modeling, clear writing, and thoughtful discussion are expected. Regular short writing assignments are expected, and a thoughtful analysis of policy and scientific data will be part of most class sessions. The main objective of this course is to teach some basic facts about how the world works, from the viewpoint of physics. These facts are intended to inform your views on important developments and policies in the modern world. This will require you to learn new words, new ideas, and abandon some old ones. It will also require numeracy. The course will provide multiple opportunities for you to express claims, evidence, and reasoning in a scientific fashion in response to written prompts, readings, and experiences.

Screening Latin America- Societies in Movement

Instructor: Rafael Ioris, rafael.ioris@du.edu

Course description: Latin America is one of the most fascinating regions of the world. Throughout its historical evolution, different civilizations came together into creating original socio-political and cultural formations. Keeping that in mind, this introductory course invites you to reflect on the fascinating experiences of Latin America societies in their painful path over time, inviting you to critically reflect about the historical evolution of multi-racial, multi-cultural societies in general. The activities for the course are structured around themes dealing with the region's historical evolution and the present-day challenges of building a modern, developed and egalitarian society. All these themes provide the ingredients for the drama inherent in the histories of the countries of the region, a drama that filmmakers have depicted in a great number of movies treating important issues and events in Latin American history. One of the main goals of our investigation is to understand how this process of continuity and/or change has been wrought by the multiple social agents within the various parts of region. By watching, analyzing, and critiquing, orally and in writing, collectively and individually a series of films, documentaries, and videos made by Latin American, North American, and European filmmakers, we will both critically analyze the historical development of Latin America as well as the assumptions and biases which go into the making films about the region. What is more, by taking part of this process, students will develop

a deeper appreciation for the complexities embodying Latin American societies and the problems the region faces today.

Religion and Hip-Hop Culture

Instructor: Jason Jeffries, jason.jeffries@du.edu

Course description: Religion and culture are inextricably linked. Churches and faith communities remain a primary space of contact between religion and culture. Such institutions are sustained by their ability to speak to, and across, a number of generations at once. Knowing this, many religious institutions are at a crossroads regarding how best to approach and interpret the growing influence of hip-hop culture on these generations. When rap music first emerged, it was considered urban street music. At that time, many thought it a fad, a musical expression that would soon pass. Today, it helps to define a generation, what some have even labeled the “Hip Hop Generation.” Understanding religion as the “Quest for Complex Subjectivity” or more simply the effort to make life meaningful in complex ways, this course explores the relationship between Hip Hop culture and religion. That is to say, this course is concerned with discussion of the ways in which Hip Hop culture discusses and provides life meaning in complex ways. This will be accomplished by: (1) discussion of the history and content of Rap Music; (2) examination of religion in rap music; (3) exploration of the religious sensibilities of rap artists; and (4) discussion of the implications of the connection between rap and religion.

Multiple Parallels: Euclidean and non-Euclidean Geometry

Instructor: Michael Kinyon, Michael.Kinyon@du.edu

Course description: This course is a deep dive into classical geometry with a strong historical flavor. We will start by working through the early portions of Euclid’s *Elements*. The recurring theme will be Euclid’s Parallel Postulate and how it vexed geometers in Euclid’s time and beyond. Why, they wondered, would something so intuitively obvious need to be a postulate; cannot it not be proven like all the propositions in the *Elements*? It was not until the 19th century that Janos Bolyai and Nikolai Lobachevsky independently showed that the answer is no, there are non-Euclidean geometries where the parallel postulate is false. And in the 20th century, relativity showed us that non-Euclidean geometry is not just an intellectual exercise, but is in fact a part of the physical world.

You are what you eat: A course in Food Chemistry

Instructor: Michelle Knowles, michelle.knowles@du.edu

Course description: The goal of this course is to investigate molecules that we eat, what cooking does to them, and the science upon which we base nutritional decisions. In the past 50 years food has changed substantially and “food science” was invented. We will discuss what we eat, from food molecules to plant genetics, and do laboratory experiments to see what is really in our food. During the course we will cover how food goes from the farm to the table and our focus will be on the chemistry that occurs during food processing and cooking. As a community, we will design, discuss and perform experiments where we can observe the physical and chemical transitions that occur when preparing food and, unlike a typical chemistry lab, we can enjoy eating our products. This course has a significant hands-on “lab” where we work as teams to test kitchen hypotheses so that we can solve mysteries like “Why do avocados brown?” and “Why should I care about the Maillard reaction and the formation of 2-acetylpyrroline?” By the end of the course, you will be

able to write scientific papers, perform scientific literary research, and to intelligently discuss food chemistry topics.

Im(possible) Worlds: The Fantastic Short Story in the Américas

Instructor: Alison Krögel, akrogel@du.edu

Course description: In this course students will study Fantastic short fiction of the Américas which was originally written in English, Spanish, Portuguese, and Quechua. We will read, analyze, and discuss Fantastic short stories that explore the complexity, ambiguity, and mystery of the human psyche. “Fantastic” literature forces readers to consider whether certain events, characters, or images exist in the realm of the lived ‘real’ or the ‘supernatural’. In Fantastic literary texts, ‘reasonable’ explanations are resisted in an effort to present the unpredictability of memory, fate, political oppression, dreams, and nightmares. Authors may also deploy Fantastic literature as a tool for critiquing Power when they create socio-political allegories under the guise of a fanciful ‘ghost story’. This seminar begins with a discussion of the rise of the short story genre and the important intersections of the Fantastic, the Gothic, and the Magical Real. Students will study the ways in which short story authors from the Américas have influenced and responded to each other’s work throughout the late nineteenth and twentieth centuries. In addition to short stories, class texts will also include selected films, paintings, photography, and poetry.

Down the Rabbit Hole: Critical Reading & 'Reality' Through Literature and Film

Instructor: Chad Leahy, chad.leahy@du.edu

Course description: This course introduces students to key concepts in critical theory and philosophy through close readings of a variety of texts (film, short story, novel, theater). The works studied in this course challenge us to explore how language, memory, gender, race, politics, economics, and other factors shape the ways in which ‘reality’ is represented, perceived, or constructed. Amnesiacs, Androids, Dreamers, Murderers, Puppets, Soldiers, and Zombies will be our guides as we actively engage with such questions as: What is ‘real’ or ‘true’? Can our perceptions of ‘reality’ or ‘truth’ be trusted? How or why might our perceptions be distorted? To what extent are our identities fashioned through such processes of distortion? What role do narration and representation, language and memory, politics and economics, or society at large play in these sorts of processes? Decisively, what interpretative tools are required to critically approach such questions? How might these same tools be deployed in the interpretation of texts more generally? This course actively explores these and other questions throughout the quarter through reading, writing, presentations, dialogue, and critical reflection.

Constructing Sexualities: Identities, Intersections, and Inequalities

Instructor: Amie Levesque, amie.levesque@du.edu

Course description: Sexuality is a significant part of human identities. In this course, we will create an engaging intellectual community that examines the ways in which sexualities are constructed in our society through three units. First, we will look at the development of sexual identities and the meanings we assign to those identities within our society. Next, we will uncover the complexities of sexual identities as they relate to intersections of race, class, gender, place, and disability, examining the powerful connections between sexuality and our social location. Finally, we will explore sexualities through contexts of inequality, specifically through the narratives of marginalized sexualities and privilege, as well as the policing of sexualities more broadly. Course

materials and assignments will draw on the work of scholars who study sexualities, gender, feminism, embodiment, and queer theory.

Media, Power & Sexualization

Instructor: Rachael Liberman, Rachael.Liberman@du.edu

Course description: In our contemporary cultural landscape, we often question: What is the relationship between the increased visibility of sexuality in media culture and our everyday lives? Recent scholarship suggests that we are experiencing a “sexualization of culture”; a process whereby sexual meanings are becoming more mainstream through mediated channels such as film, television and social media. This course unpacks the “sexualization of culture” thesis and prompts you to think critically about the impacts of media messages on sexual knowledge and meaning-making practices. Readings will draw from scholars who support this thesis as well as scholars that argue that the current “sexualization of culture” argument relies on moral, rather than social or political, frameworks. In particular, this course focuses on developing media literacy skills, from an intersectional perspective, and explores issues such as the sexualization of teenagers; mediations of consent; regulating sexting; and pornification. You will have the opportunity to explore these issues in-depth and will be encouraged to develop their own critical stance through course discussions, in-class activities, screenings, and a final group project.

Resistance in the African Diaspora

Instructor: Mamadou Ly, mamadou.ly@du.edu

Course description: In one of his memorable political speeches, President Thomas Sankara of Burkina Faso, one of the most popular iconographic revolutionary leaders of the African Diaspora, forewarns, “Nous avons besoin d’un peuple convaincu plutôt qu’un peuple vaincu. La patrie ou la mort: nous vaincrons.” [We need a convinced people rather than a conquered people. Homeland or death we shall overcome.] This nationalistic message has been a spearhead of the political and literary leadership of the “former” colonies from the early days of decolonization to our current times. In this seminar, we will examine how African and Caribbean writers and artists have, through their work, fought against the oppressive policies that still remain, even after the official abolition of slavery and colonialism. We will analyze a diverse selection of Pan-African films and literary works that respond to racial, ethnic and cultural forms of “othering.”

Crossing Over: Negotiating Borders and Latinx Border Identities

Instructor: Sergio Macias, sergio.macias23@du.edu

Course description: Who am I? How do I see myself? How do others see me? Where do I fit? This FSEM probes identity and borders: movement across boundaries of geography, nationality, race, gender, sexuality, language, and culture. Through analysis and interpretation of cultural text (novels, short stories, slam poetry, comics, music, film, visual arts, social media) students explore dynamic dialogues and processes of U.S. Latinxs articulating their hybrid identities. Students read, interpret and analyze Latinx voices that exemplify border identities and experiences through discussion, writing, and community. We discuss the notion of inclusive excellence: the practice of equity, diversity, and inclusion. Fundamental course questions are: 1) how do diverse Latinx voices, including border identities, fit into American academia?; 2) what is the role of border identities in decolonizing academia institutions, inclusive excellence?; and 3) How can we move beyond good intentions, create meaningful change, and imagine other possibilities and futures?

Topics include: cultural and political exchange along the U.S.-Mexico border; performance identity; transnational double-crossings through art, music and food; intersectional spaces; Chicana and Latina activism; (mis)identifications and coping with feeling othered; Latina stereotypes and media representations; Latina reclamation of voice, body, and sexuality; the decolonization of masculinities; and others.

Personal Histories of Photography

Instructor: Roddy MacInnes, Roddy.MacInnes@du.edu

Course description: This course celebrates the enduring tradition of social documentary photography and visual storytelling. Participants will practice basic principles of photography, such as; camera, lighting and composition. Basics of Adobe Photoshop and Lightroom will be presented as post-production editing tools. Contemporary Social Documentary Photography practice will be positioned within the context of the history of photography. Emphasis will be on the production of socially engaged photography projects, from conception to print. The course explores parallels existing between cultural and personal histories of photography. Class objectives prepare students to articulate ideas using the photographic medium, not just technically and aesthetically, but also intellectually. Completing photography assignments and participating in critiques provides opportunities to expand perspective, and in the process, advance artistic and aesthetic ways of seeing. Students are required to: engage in critical analysis of photography; advance photographic skills; increase self-awareness; celebrate intellectual curiosity and gain appreciation for the inter-connectedness of life. A community engaged collaboration will be a component of this course. Collaboration with another DU class may also be a component.

Introduction to Asian Art

Instructor: Sarah Magnatta, sarah.magnatta@du.edu

Course description: This course explores the art and architecture of Asia from the Indus Valley Civilization in India to the 21st century in Japan. We will discuss the role of indigenous religious traditions, including Hinduism, Buddhism, and Daoism, as well as the role played by imported religions, including Islam and Christianity in the stylistic development of architecture, painting, and sculpture in India, China, and Japan. In addition to addressing the religious and social contexts of the works, this course will also analyze political themes of power and authority in earlier periods as well as nationalism and modernist movements during the colonial and post-colonial periods. The course begins with an overview of art historical terminology, utilizing the public works on DU's campus.

Beyond Vikings and Angry Birds – The Nordic Utopia

Instructor: Ann Makikalli, ann.makikalli@du.edu

Course description: The Nordic countries rank consistently high on global comparisons of wellness, satisfaction and happiness. Among them, these five countries - Denmark, Sweden, Norway, Finland, and Iceland - boast exemplary educational systems, the most gender-equal societies in the world, sustainable environmental policies, influential design, and flourishing economies. What is the story behind the success of these high-context cultures? What factors contribute to the values and national identities of the Nordic countries? What lies behind the Nordic utopian myth? By examining facets of society unique to the Nordic countries, students will develop a holistic understanding of the symbiosis of the physical environmental features of the region with

the history, economics, and cultural expressive forms. Exploration of the topic will include both non-fiction and fiction texts, films, guest speakers, and field trips.

Design Your DU: A 4D FSEM

Instructor: Heather Martin, heather.martin@du.edu

Course description: When we were young, many of us were taught that adult life proceeds in an orderly and linear fashion, moving smoothly from one life stage to the next. Yet, most human lives are populated with tragedies and disruptions, unexpected joys and challenges. We may choose to fight against these uncertainties; or, we may delight in our beautiful and unpredictable journey. This FSEM is about transitions: how we understand and manage them; and how we can use them as opportunities to grow and thrive in lives of our own making. By taking a deep dive into their past, present, and multiple possible futures, students in this class will learn about the art and science of change, and how to become agents in their own academic, personal, and professional lives.

As part of the 4D student experience, this FSEM will engage four student dimensions (4D): personal and professional development; physical, emotional, and financial well-being; personal values and character; and intellectual growth. Students will map and explore their educational journeys—cultivating relationships, integrating learning across classes, and finding ways to improve their communities. Class activities and projects will engage current research in the four dimensions and ask students to apply these concepts in real-world contexts. In addition, 4D FSEM students will participate in out-of-class events and activities throughout their first year.

The Human Condition: Emotion and Sentiment Expressed through Music, Visual Art and Literature

Instructor: Joseph Martin, jmartin@du.edu

Course description: This course studies the lives and works of civilization's masters of expressing emotion. We'll study music compositions, paintings, sculpture, and literary works, and see how geography, time periods, and personal crises influenced the way these creators of art expressed themselves. In seeking similarities in emotional expression across diverse time periods and different forms of art, we will strive to find a truth to these expressions that is timeless and helps us come to a greater understanding of how we, ourselves, express things artistically. Students will leave the course with a better understanding of how to approach art in a true sense of appreciation and will be challenged to develop an artistic and intellectual curiosity to embrace a lifelong experience of growth in understanding art. Students will be guided on how to view art, and how to listen to music and formulate personal opinions about the pieces presented. Critical reasoning will be required to evaluate the effectiveness of each artist and to ultimately find a way to express your own emotional truth through expressive weekly assignments. Through the writing component, class discussions, and additional projects, students will have a broad range of experience to help them embrace the academic community here at DU.

4D: Exploring Psychology, Exploring You, Through Theater

Instructor: Kateri McRae, Kateri.McRae@du.edu

Course description: This course will actively explore topics in psychology that are showcased in theatrical productions (online and in-person as health restrictions permit) that we will see as a class. Students will learn to analyze and discuss the topics that are introduced through theatrical

performance and continued through in-class presentation of current psychological theory and research. Students will also be encouraged to reflect formally on their own psychological growth. This class will focus on four student dimensions (4D): personal and professional development; physical, emotional, and financial well-being; personal values and character; and intellectual growth. As part of the 4D intellectual community, students will map and explore their educational journeys—cultivating relationships, integrating learning across classes, and finding ways to improve their communities. Class discussions and activities will define the four dimensions and ask students to apply these concepts outside of class. In addition, 4D FSEM students will participate in out-of-class events and activities throughout their first year.

Pirates: Sailors, science, and the Seven Seas

Instructor: Keith Miller, Keith.Miller@du.edu

Course description: Pirates are a misunderstood lot. Villains to many, heroes to some, and hired mercenaries to others. Yet their stories, ones of adventures, battles, and treasure, capture the imagination of most. Science too, especially in the public domain, is often misunderstood. Why is that? I posit it's all about "your attitude." This seminar will engage students to analyze pirates and their stories, to identify underlying science, technology, engineering, and math (STEM) concepts hidden in their adventures and the pirates "way of life". Inspired by films and readings, students will further research selected scientific principles as well as discuss literature on informal science education. In culminating projects, students will design, test, and deliver pirate-inspired science outreach activities to children in informal science settings.

Connecting Our Mind, Body, and Environment: A 4D FSEM

Instructor: Julie Morris, julie.a.morris@du.edu

Course description: What exactly is "well-being", and how do we achieve it? How does the health of our physical body influence our mental state? How can our thoughts, beliefs, and attitudes impact the biological functioning of our bodies? How do our choices and behaviors shape our cultural and biological environment, and how does that environment then affect our mental and physical health? It's complicated! In this FSEM we will delve in to some current research focused on these questions and connections and reflect on the usefulness of this knowledge in our own every-day lives. Additionally, through participation in the broader 4D intellectual community at the University of Denver, we will begin to explore ways to engage with resources and programming at DU that will start you on the path to advancing intellectual growth, exploring character, pursuing careers and lives of purpose, and promoting well-being for yourself, our communities, and our world!

Earth and Fire

Instructor: Mia Mulvey, mmulvey@du.edu

Course description: What is clay and where does it come from? How do glazes work? In this seminar we will investigate one of arts most ancient materials, diving into the chemistries, creative applications and historical uses of the material. Starting with the periodic table, students will experiment in the glaze lab as well as apply their knowledge in hands-on creative research projects. Students will develop their understanding of the technical aspects of clay and glazes as well as the methods, histories and chemistries of firing. In addition to material science, students will craft their own functional artworks in which to apply their knowledge. The end of the term will culminate in outdoor feast utilizing the objects created in the course. Students will work to develop the

understanding and ability to manipulate materials as well as hone their creative voice by understanding and thinking critically about the world around them, all while having fun in the studio and gaining an appreciation for the power of art and science. No prior experience necessary.

How Thingamajigs Work? Moving Beyond the Technical Lingo

Instructor: Balasingam Murugaverl, bmurugav@du.edu

Course description: Intelligent devices are rapidly entering our everyday life. We are constantly bombarded with technical lingo - intranet, GPS navigation, bandwidth, DSL, multi-media... Unfortunately, these jargons make it difficult to sort out important terms from technical trivia and contribute to the fear and ignorance towards technology that many people have. The aim of this seminar course is to ease students' fear of technology and improve their understanding of how modern technology works. This course is an academic enrichment program that is intended to cultivate problem solving through critical evaluation and skill building through hands-on activities. How Thingamajigs Work is appropriate for students of any discipline who are just curious about how things work. The aim of this seminar course is to ease students' fear of technology and improve their understanding of how modern technology works. When you learn how to do something, you have a skill, all you can do is use it the same way over and over. But when you understand how something works, you can reason and expand upon them infinitely, you simply own it intellectually. The course will be conducted in an informal educational environment where students are expected to participate in the discussions on assigned topics and integral activities. The activities will include information gathering, deductive reasoning, hands-on technical activities, and team competitions that are specially designed to improve the students understanding of the modern technology.

Human Nature: Perspectives from Philosophy and Science

Instructor: Marco Nathan, marco.nathan@du.edu

Course description: The topic of human nature provides the backbone for some of the oldest and most fascinating intellectual debates in both Eastern and Western cultures. Despite its longstanding history, the question of whether human beings are the product of nature or nurture is under constant transformation, due to the influence of new scientific discoveries and philosophical refinements. Indeed, topics such as genetic determinism, innateness, health, and the biological status of races provide some fine examples of truly interdisciplinary research which requires the collaborative work of philosophers, psychologists, biologists, sociologists, anthropologists, political theorists, and many other scientists and humanists. The aim of this course is to explore the philosophical foundations of human nature and to discuss them in relation to recent discoveries in the psychology, biology, and other branches of science.

Buddhist Meditation: Traditional and Modern Contexts

Instructor: Benjamin Nourse, benjamin.nourse@du.edu

Course description: This course will explore the wide range of Buddhist meditations and their relationship to Buddhist ethical and philosophical teachings. The course will also examine how these Buddhist meditations are currently being adapted for use in a variety of settings, from health care and psychology to education and the criminal justice system. These adaptations prompt questions about the nature of meditation. What is lost or gained when meditative practices are taken out of their traditional cultural and religious contexts and used in new contexts? Is it

appropriate to teach meditation in places like US public schools? Are recent scientific studies of meditation compelling enough to warrant wide-scale promotion of these practices? Materials for the class will be drawn from classical Buddhist literature, scientific studies, news media, and the popular press. There will also be opportunities to meet with people who are currently applying mediation in a variety of contexts in the Denver metro area and beyond. Students in the course will practice secular forms of meditation and keep a journal of their experiences and reflections.

Modern Classics of World Literature

Instructor: Maik Nwosu, maik.nwosu@du.edu

Course description: This course is a literary journey around the world – with some of the best literary texts as our tour guides or windows into different cultures and aesthetics. We will also examine how these literary works and the literary traditions that they represent engage one another in (a reconstructed) conversation across space and time. Central to these inquiries is the idea of the “classic.” What is a literary classic, particularly a modern literary classic, and how does a work of literature become canonized?

Pioneering in Colorado: Land, Bodies, and Violence in the Sand Creek Massacre

Instructor: Angela Parker, angela.parker@du.edu

Course description: This course uses critical analysis of primary sources to understand Sand Creek as a crucial site necessary to understand the history of Colorado and Denver University. Students will critically read and analyze primary source documents including newspaper articles, testimonies from massacre participants and survivors, artwork, material culture, letters, oral history, music, and proclamations in order to understand Sand Creek as a place and a history related to the creation of Colorado and Denver University. Additionally, the class will visit specific sites associated with Sand Creek in order to understand place-making and memorialization as a function of historical meaning-making and analysis. These sites include the Sand Creek Massacre site (two visits), History Colorado, the Silas Soule memorial plaque, and Riverside Cemetery (where Silas Soule and Joseph Cramer are buried).

Who Do You Think You Are?: Performing Characters in Film & Literature

Instructor: Anne Penner, anne.penner@du.edu

Course description: Who Do You Think You Are is designed to give First-Year students several learning opportunities. First, it will allow them to analyze and respond imaginatively and empathically to a range of characters in literature and film, thus coming to understand character as a critical storytelling element. They will think deeply about the essential elements of characterization through various young protagonists in popular films (such as Ladybird and Moonlight), as well as in novels, graphic novels, and plays (such as Fun Home and The Wolves). Second, they will write, share with the class, and revise a monologue in the first person for each of three different characters, either of their own creation or ones they’ve studied. And third, they will revise, rehearse, and present two of their monologues “in character,” practicing performance techniques, including of body and voice. They will be required to visit the Writing Center at least once to get guidance on their written pieces. Though this course fulfills all five Promises for the Future described in DU IMPACT 2025, it will most deeply investigate “The Promise of Creative Collaboration and Ethical Engagement.”

Arendt and Us

Instructor: Ryan Perry, r.d.perry@du.edu

Course description: After the 2016 election, Hannah Arendt's *The Origins of Totalitarianism* became a surprise bestseller, surprising not only because the book was written over 60 years before the election, but also because it is a heady mix of history, political theory, and philosophy. Nevertheless, ever since, think pieces discussing "what Arendt can tell us about our own moment" perennially pop up online. This class will take that issue seriously by doing what few people actually did—even what few of the authors of those pieces probably did—which is to read Arendt's work in the context of other recent material about our own time. Arendt's book has a great deal to teach us not only about the present time, including how one might think about the world in all its complexity. As college is a point in one's life where the obligation to understand the world begins to fall squarely on your own shoulders, Arendt will provide us with a guide to how we understand that obligation, just how complicated a task that will be, and what we might do to fulfill it. Moreover, we will do that exploration as a community, learning all the while how to navigate this new community of which you are a part here at DU.

History of Colorado

Instructor: William Philpott, william.philpott@du.edu

Course description: What do Ute Indians have in common with plutonium warheads? The Pikes Peak gold rush with the Ku Klux Klan? Ski troopers, fur trappers, and Japanese farmers with sugar beets, "synthetic" trout, desegregation battles, and the Dust Bowl? They've all powerfully shaped the history of the state you find yourself in. Whether you grew up here or are just now moving here, this course will help you feel more rooted in Colorado, more familiar with its rich history, and more aware of that history's relevance to our own times. Sweeping from precontact Natives to the present, we'll follow four main paths of inquiry. How have different people imagined or idealized Colorado? What kinds of communities have they created here; whom have they included or excluded, and why? How have Coloradans related to the land and natural environment—exploited, modified, or taken strength from it, shaped and been shaped by it? And how have different groups of Coloradans collaborated or competed against each another to realize their goals, whatever they might have been? We'll be guided in our studies by the writings of other historians, but also by the words of people who themselves made Colorado history, and by the marks they left on the landscape.

Based on a True Story (BOATS): Our Complicated Obsession with True Crime Media

Instructor: LP Picard, lauren.picard@du.edu

Course description: There's no denying that we are in the midst of a true crime boom. The 2010's have brought us prestige true crime dramas, like "Serial," "I'll Be Gone in the Dark," and "O.J.: Made in America." But this boom, with its tiger kings, Investigative Discovery programming, and comedy murder podcasts, has revealed more than just the marketability of the genre. It's shed light on our own dark obsessions, raising important questions about the blurry lines between reporting, unpacking, and sensationalizing. This seminar will explore the history of true crime entertainment, which goes back to at least the birth of modern journalism if not all the way back to the violence captured in early cave paintings. Our course will not focus on the crime itself but rather the stylized depictions of real events that make up the genre—podcasts, documentaries, episodic television shows, written texts, and more. The task of our seminar is to examine the factors that shape these

stylized narratives, to explore the effects they have on their audiences, and to unpack their ethical, rhetorical, and critical implications. Students will determine the shape and direction of their writing by pursuing questions related to their own interests.

Tabletop Games: History, Theory, Design

Instructor: David Riche, david.riche@du.edu

Course description: Games are as old as human civilization itself, dating back to ancient board games like Mancala, Senet, and the Royal Game of Ur. Although some games have been lost to time, others (like Chess and Go) have endured great change. And while video games continue to gain cultural and commercial purchase, tabletop games have also been experiencing a “renaissance” in recent years, drawing the attention of players and scholars alike. Today, monster manuals, trading cards, and Kickstarter-sponsored board games are at the center of a growing subculture. But the study of games, their cultures and their histories, raises important questions. What is a game? Why do we play them? Are they meant to be fun? How does culture influence them (and vice versa)? How are they designed? Multiple fields of study have offered a range of insights, including ludology, philosophy, psychology, and media studies. This course will introduce you to some of these varied perspectives by applying them to games in general and to tabletop games in particular. Assignments may include the design and playtesting of an original game.

Pandemic through the lenses of Literature and Arts

Instructor: Murat Rodriguez-Nacif, murat.rodriguez-nacif@du.edu

Course description: The course I am proposing will explore answers to the question “How do tools of the humanities help us make sense of what we are experiencing?” The events of the past year have brought us face to face with our deep humanity. In this particular and difficult context, it is of the utmost importance to make sense of the pandemic, and literature and works of art can help us with that task. Literature and art provide us with guidance, hypothetical scenarios, creative thinking, empathy, and recognition. Furthermore, it can help us adjust our responses and engage in problem-solving, critical thinking and creativity for the benefit of general public. We all know and expect the COVID will bring fundamental social and cultural changes, this is why I believe that we, as scholars and humanists, must provide with academic and creative artifacts to help us navigate these intricate moments. Additionally, the pandemic has had unfortunate consequences beyond health. It has brought misinformation, fear, racism, xenophobia. As an Arts & Humanities scholar, it is also my duty to cast a light in the importance of reasoning skills that allow us to find truth, empathy, and make informed decisions.

What is Attention and Why Does It Matter?

Instructor: Christy Rossi, Christy.Rossi@du.edu

Course description: In this course we will work together to understand multiple aspects of attention. The course will be structured around three units: Foundations of attention, Individual differences related to attention, and Applying concepts related to attention. There will be weekly opportunities for active-learning and in each unit, students will be asked to find different sources of information to bring to our classroom discussions and help build our collective understanding about attention. Many course topics can be directly applied to challenges faced by First-Year university students, such as How can I apply my understanding of the limits of attention to better

approach my coursework? and Is it beneficial to multitask during class so that I can both attend to the lecture AND get my lab report for another course done at the same time?

The Real and the Imagined

Instructor: Casey Rountree, casey.rountree@du.edu

Course description: This course will explore the fundamental human need to understand and explain the world around us, and the ways artists, historians, scientists, and governments have sought to depict and sometimes create a reality. It will deal with the role literature, visual arts, science, and culture play in both our efforts to reflect accurately our sense of reality and our continuing need to create new “realities” when previous models no longer serve. The class is designed to develop an active intellectual learning environment for students. It will be discussion based, with collaborative learning features. Students will read challenging and engaging texts from a wide range of time periods, cultures, and genres. They will write a variety of documents where they have opportunities to choose the subject they will focus on and research arguments on complex ideas to develop deeper levels of understanding of the course’s subject matter. They will have regular opportunities to discuss and debate challenging intellectual questions. And they will be asked to present their work to their classmates in a positive, constructive environment. Students will develop productive relationships with their peers and me, which will help me serve as their academic advisor throughout their first year.

Narrative Across Media

Instructor: Adam Rovner, adam.rovner@du.edu

Course description: What would Plato say about video games? How is a short story put together? Is it meaningful to insist that a book is better than its movie adaptation? Answers to these questions can be found when we study storytelling—narrative. Narrative is a basic human need, but one of our most complex endeavors. Narrative can take an almost boundless number of forms in our modern culture, including: gesture, speech, writing, music, painting, photography, cinema, radio, television, comics, theater, and video games. This seminar examines how the principal elements of narrative are emphasized by different genres and media, and how narrative forms change over time. In particular, this course focuses on how stories may be adapted. This seminar’s goals include: (1) introducing students to narrative theory through an active learning environment, (2) familiarizing students with interpretive strategies and critical reading skills in a supportive intellectual community, (3) helping students put theory into practice through a series of written exercises that focus on university level academic expectations, and (4) fostering a strong advising relationship with the instructor. Through discussion, presentation, reading, analytical writing, and focused creative work, students gain an appreciation for how various thinkers have interpreted, analyzed, and utilized the art of narrative.

Fiction Writing about Hot-Button Issues

Instructor: Blake Sanz, msanz@du.edu

Course description: Often, when big issues make headlines—think of #MeToo, or military conflicts in the Middle East, or sex scandals in the Catholic Church—some of us turn to news or social media to learn more. But how do such issues get represented fictionally, in short stories and novels? How do those stories change how we think about those issues? And how do authors write such stories? In this class, we’ll read fiction written in the last 15 years in which authors contend

with hot-button issues. For example, we'll read a novel in which a priest is caught up in a sex scandal. We'll read excerpts from a novel in which a teenager shoots up his school. We'll read a short story in which a woman has an unwanted sexual encounter. We'll read a short story in which an American soldier is deployed to the Middle East. In reading those and other stories, we'll examine how these authors approach hot-button issues in ways that go beyond how the news describes them. And in the end, we'll also try our hand at writing stories in this vein.

Designing and Reflecting on Your DU Experience: A 4D FSEM

Instructor: Nancy Sasaki, nsasaki@du.edu

Course description: In this course, students will examine themselves as it relates to their personal wellness and future adventures, both in regard to future careers as well as your life's "work" of making the world a better place. We will look inwardly as well as outwardly and investigate your growth up to the present and then investigate where you would like to grow next.

As part of the 4D intellectual community, students will map and explore their educational journeys—cultivating relationships, integrating learning across classes, and finding ways to improve their communities. Class activities and projects will engage current research in the four dimensions and ask students to apply these concepts in real-world contexts. In addition, 4D FSEM students will participate in out-of-class events and activities throughout their first year.

Who Are You And Why Are You Here?: Social Class and College Culture

Instructor: Aubrey Schiavone, aubrey.schiavone@du.edu

Course description: This course takes an interdisciplinary approach to understanding the relationship between social class and college culture. Readings and class discussions include topics from the fields of history, education, sociology, and writing studies. Additionally, recent news media about contemporary American higher education issues will allow for both scholarly and popular perspectives in our readings and discussions. Together, we will examine several themes including a theorization of social class, a brief history of higher education in America, popular conceptions and narratives of party culture in college, college choice processes, major trends in college student populations, college athletics, working in college, student debt, and connections between college and careers. The class will be organized around a cumulative, reflective ePortfolio hosted on DU Portfolio. Assignments include reflective, argumentative, and multimodal pieces; specifically, students will compose two class discussion posts responding to particular readings in the course, a related presentation and discussion leading assignment, two reflective photo posts, a final video composition, and weekly reflections on course themes, readings, and discussions. Through such readings, themes, and assignments this course will engage new undergraduate students in the meaningful consideration of an urgent, formative moment in their lives: their transitions to college.

Understanding Lincoln

Instructor: Susan Schulten, sschulte@du.edu

Course description: This seminar examines Abraham Lincoln as a public figure and political thinker. After we have established the foundation of Lincoln's life and career, we will delve into more complex problems, including his position on slavery, reputation as the "Great Emancipator," leadership as president, conduct of the war, and understanding of the Constitution. We will also

explore competing views of Lincoln, and ask how he became so central to our understanding of the nation.

Reading Maps: Literature, Culture, and Cartography

Instructor: Geoffrey Stacks, geoffrey.stacks@du.edu

Course description: Maps are everywhere. You can find them on your phones, in your car, at BuzzFeed. Cartography is an old technology, but it seems to have flourished in the twenty-first century. We rely on these helpful maps, but they do far more than give us directions. Maps affect how we see the world; they influence our understanding of culture, politics, and even our own identity. In this class, we will read literature and critical essays that explore the ways in which cartography not only describes the world but actually shapes it. Part of the class will focus on critical/philosophical writings about maps. These essays will look at how maps, which seem to be neutral, actually have authors and arguments and can change the way we move through the world, understand data, and think of ourselves. During the second part of our class, we will read a variety of literary works (short stories and poetry) that demonstrate the literary nature of cartography. What can literature and art teach us about becoming careful readers of cartography instead of passive, naïve consumers of a powerful technology?

Pacific Century -- America, China, and Competition for Global Leadership

Instructor: Jing Sun, jing.sun@du.edu

Course description: China and America are world powers with global responsibilities. How they cope with each other will shape the future of not only their own people but the rest of the world. Can America maintain its global leadership at a time when its domestic politics is getting more and more tumultuous? Will China try to fill the power vacuum left by an increasingly divisive America? Will the two superpowers learn to co-govern a host of global issues? What implications will this process bring to the people of these two countries and beyond? These are just some of the questions we will examine in this class.

Co-envisioning Utopia through the lens of a wellbeing economy

Instructor: Paul Sutton, Paul.Sutton@du.edu

Course description: There is growing consensus that human civilization is facing profound challenges to its continued existence. Many of these challenges manifest as the inter-related problems of population growth, economic inequality, resource depletion, climate change, ocean acidification, and the 6th mass extinction in the history of the planet. This course will explore how our economic systems are to blame for these problems and how a radical transformation of our economic systems may allow us to achieve a sustainable and desirable future. This course will be taught in the spirit of this quote from Buckminster Fuller: “You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.” The new model we will work to develop in this course is a vision for a sustainable well-being economy for the small town of Morrison and the state of Colorado. The well-being economies we may envision will conform to three basic principles: 1) Exist within planetary boundaries (Environmental Sustainability), 2) Fairly distribute resources (Equitable Distribution), and 3) Efficiently allocate resources (Wise Rational Use). Students will use social media and written reports to share and communicate the results of their study, dialogs, and co-creations.

Welcoming the Stranger: Hospitality, Culture, Language and Migration

Instructor: Ethel Swartley, Ethel.Swartley@du.edu

Course description: Has a stranger ever invited you for tea? Have you ever eaten a lavish meal cooked by someone whose only water source was a pipe sticking out of a concrete wall? No matter how rich or poor, every culture has rules for welcoming a stranger. Some feed you until you want to burst. Some wait for you to speak first, not wanting to embarrass you. How does it feel to be a stranger in a new place? What if that place is a country where you don't even know the language? How does it feel to be a newcomer in the United States? This course explores differing cultural concepts of hospitality and how these affect attitudes toward immigrants and international visitors. Specifically, we wrestle with three important questions: How do American values of generosity and hospitality compare with similar values practiced in other cultures? How might different values, languages, and ideas about hospitality affect visitors' experiences in the United States? How should these values affect Americans' attitudes toward immigration and world events? We will use readings, discussions, guest speaker presentations and experiential activities to explore these questions.

Design Your DU: A 4D FSEM

Instructor: Kara Taczak, kara.taczak@du.edu

Course description: In a culture captivated by ubiquitous technology, it can sometimes feel like our existence is flattened into a series of selfies and snaps. Over time, we may come to wonder, who am I really? And, in turn, what do I want from my college experience? By exploring the narratives of their past, present, and future selves, students in this class will engage meaningfully with issues of identity, career, and academic pursuit. Design Your DU will focus on four student dimensions (4D): personal and professional development; physical, emotional, and financial well-being; personal values and character; and intellectual growth. Students will use a Bullet Journal (BUJO) as their primary mode of work (a BUJO is a personal journal organizer designed entirely by the writer/student). Additionally, students will be expected to engage in out-of-class events and activities as part of the 4D experience.

Graphic Writing across Cultures

Instructor: John Tiedemann, John.Tiedemann@du.edu

Course description: The humble comic book, once derided as a frivolous form of adolescent entertainment, has in recent decades given rise to an array of innovative artistic forms that address themes formerly reserved for high culture and academia. The mysteries of sex and death, the ambiguities of history and politics, the arcana of philosophy and pure mathematics: all this and more can be found in the pages of today's graphic novels, manga, webcomics, and motion comics. In this course, we will examine the unique opportunities for cross-cultural meaning-making afforded by the combination of words and pictures in contemporary "graphic writing." We will consider how the mixed medium of graphic writing enables its creators -- including the students in class -- to tell stories that cut across boundaries of race, nation, gender, class, religion, and sexuality. In addition to reading and writing about graphic texts, students will lead discussions, create a piece of graphic writing of their own, visit with working artists and writers, and present their own work at a class colloquium.

Geographic and Environmental Issues in Modern Cinema

Instructor: Erika Trigoso, etrigoso@du.edu

Course description: Geographic and Environmental Issues in Modern Cinema is designed to provide a critical analysis of pertinent films portraying a variety of issues. In terms of geography we will analyze culture, ethnic, political and migration issues. For environmental science, students will focus on landscape change, environmental degradation, and sustainability. In doing so, students will look at geography and environmental science as a subject of film aiming to understand how the landscape and environmental issues tell a story that impact humans. This seminar involves a weekly exploration of different films, critical discussion, and a deconstruction of geographic routes and environmental elements.

Higher Education and Campus Environments

Instructor: Michele Tyson, michele.tyson@du.edu

Course description: This course will serve as an introduction to understanding the college environment and the complexities of campus and culture. The purpose of this course is to familiarize students with today's higher education landscape, interrogating the purpose of education and the role a college degree plays in society. The first third of the course will be spent discussing the social, political, and economic environments in which post-secondary opportunity exists. The second third of the course will investigate the role of college campuses, broadly, on the "traditional" college experience using an ecological framework that centers and evaluates the physical, human, organizational, and constructed environments of institutions. The final third of the course will examine the environments of the University of Denver and the effects on the individual student experience as well as the collective student body, with attention given on offering students strategies to maximize learning and development on their own college campus. In line with Inclusive Excellence, attention will be given to the impact of campus environments on diverse student populations, examining how symbols of diversity, equity, and inclusion are identified and experienced in higher education in the United States context, as well as more locally - centering the University of Denver.

Ciphers from ancient to modern times

Instructor: Petr Vojtechovsky, petr.vojtechovsky@du.edu

Course description: The purpose of ciphers is to make communication safe from eavesdropping. Ciphers have appeared around 500 BC, were widely used by medieval times, have been studied systematically since the 1800s and resulted in the modern field of cryptography. Encrypted messages changed the course of history on several occasions and many aspects of our society depend on secure encryption. It is expected that the importance of cryptography will continue to grow not only in online communication but also in the development of currency alternatives and civic aspects of democratic societies. In this course we will follow the historical development of cryptography. We will design ciphers, encrypt and decrypt messages and break ciphers using an online tool prepared by the instructor. The required mathematics is surprisingly accessible and can be explained to any inquisitive first year college student. Most class meeting will be in the form of a seminar and active participation will be required. Students will form teams; each team will give a presentation on a topic (chosen by the instructor) related to cryptography and prepare and deliver a classroom lecture on a cipher of their choosing.

Networking Italian-Style

Instructor: Rachel Walsh, rachel.walsh@du.edu

Course description: If you are interested in Italy, and are thinking about a future in Law, Business, Sports History, Communications, Music, Political Science or History, this is your FSEM! Networking and the exchange of personal, cultural and intellectual information has been around for centuries. Europe experienced a giant boom in networking activities in the eighteenth century. Italy in particular witnessed a variety of networks actively planting seeds for eventual political and geographical unification. This seminar explores differing notions of networking Italian-style during the eighteenth century, and it provides you access to the age of information exchange in three arenas: academies, periodical culture and salons. You will explore the universal nature of the period's literature, opera, and political writings and seek to answer why these works are relevant today. The seminar also provides training for Stanford University's web-based platform - Palladio - an innovative, research tool used to visualize complex, multi-dimensional data. You will discover and gather data while researching the cultural exchanges and networks of eighteenth-century Italy, and acquire the skills necessary to create visualizations of this research.

A 4D FSEM: Coming of Age as a Personal and Intellectual Journey

Instructor: Susan Walter, swalter@du.edu

Course description: This course has two primary components. On the one hand, we will explore the Coming of Age genre through films and literary texts. The works we will study and analyze are from writers and directors whose identities and life experiences vary widely. The course readings include works from many different genres including a novel, short stories, creative non-fiction, essays, films and podcasts. Some of the themes that we will explore include: love and sexuality, mentors and role models, gender norms, cultural and racial backgrounds, and how they all come together to influence identity formation. The second primary component of the course focuses on the 4D Student experience: personal and professional development; physical, emotional, and financial well-being; personal values and character; and intellectual growth. This aspect of the course will hone in on self-identity and understanding one's personal values as students embark on this exciting journey called college. By exploring the narratives of their past, present, and future selves students will engage meaningfully with issues of identity, career, and academic path. Finally, all class meetings will begin with some contemplative practices such as meditation, intention setting and reflections. Through occasional discussions of mindfulness and mental wellbeing practices, students will learn about how these activities can help us manage stress and anxiety as well as feel more present and focused, thus resulting in more engagement with class exercises, study time and life in general. In addition, students will also be encouraged to start to explore mindfulness practices outside of the classroom in order to reap the benefits that these contemplative traditions can offer them.

Mind-opening Science Fiction Shorts

Instructor: Ann Wehman, ann.wehman@du.edu

Course description: Science fiction is a broad genre that explores controversial themes in novel contexts. This allows readers to step back from their day-to-day lives and safely ask themselves: "Is that right? Is that normal? What would I do?" The aim of this course is to use science fiction literature as a starting point to have open discussions about controversial topics and to use student-led debates to see the logic behind different points of view. In addition, students will have the

opportunity to choose their own controversy, develop it into a short story, and present their take at the end of the term. Themes to be discussed include what makes us human, science vs. religion, terrorism, gender oppression, LGBT identity, social class, and unseen privilege as seen through the lens of aliens, robots, cybernetic enhancements, precognition, time travel, space travel, dystopias and apocalypses. This course is for true science fiction fans!

Musical Theft: Appropriation and Appreciation from Ariana Grande to Paul Simon

Instructor: Aleysia Whitmore, aleysia.whitmore@du.edu

Course description: This course asks, what happens when people engage with music that is not their own? How do we determine who owns music? A piece? A tradition? What is the difference between theft, appropriation, and appreciation? We will explore these questions through diverse case studies examining popular, classical, and traditional music from around the world. We will examine Paul Simon's engagement with South African musicians during apartheid, rap's overwhelming popularity among young white men in the United States, and Central African musicians' embrace of Cuban music in the 1960s and '70s. We will parse out what kinds of cross-cultural musical engagements occur, their impacts, and the responsibilities of individuals, governments, and international organizations in different contexts.

Mountains of the Mind

Instructor: Wilfried Wilms, wwilms@du.edu

Course description: The mountain is an absolute metaphor, a primordial phenomenon like water or light. It is inherently symbolic and has long played a crucial role in the cultural evolution of peoples around the globe. Consequently, mountains are infused with clusters of meaning. To the (modern) Western world, mountains were long considered *loci horribili*: terrible, inhospitable places, unsuitable for cultivation and thus useless. They were merely wilderness, places that housed the forces of evil and in which wild beasts roamed. The cultural importance of mountains increased only gradually during the Middle Ages. The fascination of and interaction with the mountains, e.g. in the form of mountaineering, that we take for granted today is a rather modern phenomenon that has its beginnings during the 18th century Enlightenment. Mountains of the Mind is an interdisciplinary course that traces the role that mountains, both imagined and real, have played in the formation of modern Western self- and national identity since the Enlightenment. We will investigate literary and visual representations and interpretations of mountains and mountaineering, ranging from the scientific to the aesthetic, the geographic to the militaristic in order to understand the fluid roles attributed to something seemingly stable like a mountain.

An Introduction to Mathematical Modeling

Instructor: Mei Yin, mei.yin@du.edu

Course description: The purpose of this seminar is to make samples of important and realistic applications of mathematics available. The goal is to provide illustrations of how mathematics is employed to solve relevant contemporary problems. No matter how simple a mathematical model is, it involves making choices and calls for creativity. The class will not assume much background in mathematics except high school mathematics.

Stuff Matters: What makes up our world, how did it get that way, and why do we care?

Instructor: Barry Zink, barry.zink@du.edu

Course description: What is all this “stuff?” Really, what is in the things that make up our world, how does this “stuff” get there, and why is it important? The answers to these seemingly simple questions are complex, and reveal many connections between people across the globe, across disciplines, and through history. The answers also touch on some of the most pressing challenges of our day, ranging from how we produce and consume energy, to how we tackle problems like prevention of disease and protection from climate change. This seminar will seek to explore this “stuff” with a special focus on these connections and grand challenges. Each week we will focus on a different substance, and will work together to understand how “stuff” as familiar as water, as valuable as gold, and as exotic as plutonium impacts our lives every day.