Spark 001 Descriptions

SPARK 001 - Agnotology: An Anthology

Taught by: Christa Fraser, Merritt Writing Program

Agnotology, or the study of ignorance and doubt, is a dive into the realm of antiknowledge, unknowledge, and skepticism. In this course, we will examine historical and contemporary news and literary sources for evidence of ignorance, anti-intellectualism, miseducation, and doubt--whether unintentional, intentional, willful, or induced, particularly in the United States. The course will provide a survey of historical and contemporary anti-intellectual and miseducation movements and moments. The course will also investigate agnotology as both a discipline and as a way to investigate the sociocultural currency and context of knowledge and lack of knowledge. In the course, students will learn how to generate research questions related to depictions and manifestations of ignorance and miseducation in folklore, mythology, fiction, nonfiction, art, religion, and news media. The class will look at case studies illuminating the dynamics of ignorance and doubt, beginning with Plato's Allegory of the Cave and moving into fake news and contemporary spreading of misinformation and disinformation via the internet and social media campaigns. Examples of anti-intellectual case studies are the anti-vaxxer movements, the Flat Earth Society, climate change deniers, and the Sokal Hoax, among other examples.

SPARK 001 - AI Investigations

Taught by: Doreen Danielson, Merritt Writing Program

If we continue to improve and evolve Artificial Intelligence (AI) potential and capabilities, will we, as humans, maintain our ethics, value, and functionality? In this seminar, you will explore the complexity of Artificial Intelligence (AI) as it continues to develop in prominent fields such as Biological Sciences, Bio-engineering, Computer Science and Technology, Mathematics, Chemical Sciences, Medicine, Business, and others depending on your interests. You will develop strategical skills to identify and evaluate the many roles of AI, explore your favorite field of interest by choosing a company or product, investigate AI's ever-developing presence in your chosen company or product, and attempt to answer a research question that you develop after completing your innovative investigation. To accomplish these steps, you will closely study your chosen company or product, conduct interviews, prepare evaluative presentations, and confidently represent your primary research

question(s) and chosen company or product's use of AI by submitting a final research paper.

SPARK 001 - Antibiotics in the Valley

Taught by: Miriam Barlow, Molecular & Cell Biology

This seminar will enable to students to gather and evaluate information relevant to the local community through primary local sources, primary literature sources, and secondary sources such as news and review articles, form opinions based on that information and to question current practices. Students will also learn to share their research findings through written and oral/visual presentations. To accomplish these goals, students will learn about different antibiotic consumers and stake holders through in class lectures and discussions. They will then take on some aspect of antibiotic consumption or use in the Central Valley and develop a question about current practices. The students will then investigate that question through literature searches and interviews with local sources and communicate their findings in two research papers, an in class presentation, and a round table discussion where competing interests are represented.

SPARK 001 - Archaeology in Popular Culture

Taught by: Holley Moyes, School of Social Sciences, Humanities, and Arts

This course in the field of archaeology interfaces with science, history, and popular culture. The goal is to encourage critical thinking and teach students the social context of the discipline of archaeology. It incorporates components of reading, writing, and basic research and library skills. It will examine how archaeology is presented to the general public, explore the myths about archaeology, and archaeologists, and contrast these popular constructs with archaeological realities. It provides an overview of archaeological epistemologies including basic archaeological history, theories, methods, and practices including the ways in which data are recognized, recovered, analyzed, interpreted, and presented. By taking this approach the course seeks to encourage better consumers of not just archaeological media but of all media by teaching critical thinking skills. Students analyze public representations by evaluating the sender, the media, and the message. The course also encourages an appreciation of historic preservation efforts and hopes to instill in the students a proprietary sense so that they will take a proactive stance in the stewardship of the faint, fragile and irreplaceable archaeological record.

SPARK 001 - Art as Social Activism

Taught by: Tess McIntire, Merritt Writing Program

In this course, you will explore the ways that artists use visual composition to shed light on issues of social inequality. You will develop and refine strategies for understanding text and performance using a variety of research methodologies while improving your ability to communicate through various genres of expression. To accomplish these goals, you will read historical studies of activist art, view documentaries that engage in mixed methods research, survey and analyze works of activist art and music, and research an important figure in the social justice movement, gathering data for qualitative and quantitative analysis. You will also attend gallery and/or performance events and engage in research activities such as taking field notes, writing analytic memos, and compiling field reports. Your research will culminate with written, verbal, and visual components.

SPARK 001 - Art of Attention

Taught by: Susan Varnot, Merritt Writing Program

To pay attention or not to pay attention: In a digital world, is a machine more attentive or intuitive than we are? To what extent are we doing our own thinking? What do we pay attention to or ignore, and how in control are we of noticing and of the present moment? What happens when data points are created for us? For how long can we pay attention to what? What do we do with our attention? In this seminar, we will examine how the artist -- in a larger, general sense -- examines and enacts art through the everyday "work" of art, in large part noticing as someone who intends to live and invent meaning not yet created. In contrast, we will also examine how the internet and advertising culture, or as one writer on the subject puts it, how "the attention merchants" buy and sell our attention. Throughout this course, we will seek to answer questions on what our attention is, how it is crafted, and how we can become more aware and craft it to be creative thinkers, individuals, and scholars -- or how we can enact the everyday work of art and noticing in our personal and academic lives.

SPARK 001 - Art of Buddhism

Taught by: Karl Ryavec, Anthropology and Heritage Studies

This seminar examines the main themes in Buddhist art that was created across Asian cultures from its birthplace in South Asia to Southeast and East Asia. The main focus will be on classic depictions of the Buddha and related persons and deities during the Classical to Medieval periods, such as in statues and paintings. Short weekly essays will be required on students' interpretation of how Buddhist

art related to its historical and social context, and the cultural landscapes where it was produced. Class discussions will revolve around the weekly readings. The main goal of the seminar is to introduce freshman to the importance attached to discussing and writing in academia, and to help students develop and improve their own writing styles through feedback on the weekly essays.

SPARK 001 - Arts of Memory

Taught by: Weisong Gao, Literatures and Languages

The study of remembering and forgetting is a historical, affective, and political project. To remember is to excavate and collect a happening from the running timeline to "keep it in mind," and to forget is to nail an event to its historical moment and never let it rebound to our consciousness. Yet as we try to forget, certain things in the past keep haunting back in forms of trauma, terror, ghost or melancholy. And as we try to remember, their loss renders us in a state of feeling self-doubt, depressed, or failure. In this course, we will study different forms of arts including literature, films, photography, performances that take up central questions of memory and loss, nostalgia and self-discovery, temporality and spatiality, longing and belonging, complicated by issues of gender, sexuality, race, and immigration. We will grapple with questions such as: how does the (in)ability to remember or to forget transform one's lived experience of cultural, intellectual, and emotional undertakings? What roles do remembering and forgetting play in our everyday life and in thinking about a different world?

SPARK 001 - Attention

Taught by: Carolyn Jennings, Cognitive and Information Sciences

Attention is a key part of our everyday lives. Some think we have moved from the "Information Age" to the "Attention Age," since managing attention has become ever more important, now that information is so readily available. Attention is also a central topic in the scientific study of mind. This course will cover the topic of attention in different disciplines, such as philosophy and psychology, so that students have a better understanding of what attention is and what it does. It will also cover the ways in which attention can be managed, and how attention interacts with various forms of technology. Readings will cover a wide range of topics, such as "Culture, attention, and emotion" and "Indistractible: How to control your attention and choose your life."

SPARK 001 - Belief in Conspiracy Theories

Taught by: Stephen Nicholson, Political Science and Cognitive Science

In this seminar, we examine why people believe in conspiracy theories and misinformation. We ask why people hold and/or spread conspiratorial beliefs, who is most likely to hold such beliefs, and why people persist in maintaining these beliefs even when presented with overwhelming evidence to the contrary. Lastly, we ask what, if any, are the consequences of holding conspiratorial beliefs. The seminar will approach these questions drawing on research from political science and psychology.

SPARK 001 - Big Sugar

Taught by: Stephen Wooding, Anthropology and Heritage Studies

Sugar consumption is skyrocketing, and no wonder - it tastes great, it feels great, it's convenient, and it's inexpensive. Unfortunately, these pleasures come at a cost. Sugar packed products are displacing healthy foods, overeating is rampant, and obesity rates are soaring. How did we get to this point? What can we do? Big Sugar takes on the challenge using the multidisciplinary tools of public health research. Beginning with an investigation of the origins of the sugar cane plant, its biology, and its use by ancient peoples, we will move toward an understanding of sugar's place in modern life. We will explore the biology of taste perception, the starting point of sugar's pleasure, and taste's surprising roles in our bodies' responses to sugar as we eat. We will probe the nutritional effects of sugar consumption (it isn't always bad) and the impact of its prominence in our daily diets. And we will delve into the social landscape of sugar consumption, including the success of business strategies for promoting it, government strategies for reducing it, and the significance of community structure and home economics to both. Throughout the course we will question assumptions and sugar myths: Is sugar always bad? Can it boost your energy level? Is it responsible for disease? Is natural sugar safer than processed sugar? Together we will find out.

SPARK 001 - Black Identities

Taught by: Whitney Pirtle, Sociology

What does it mean to be Black? Who, exactly, identifies as Black? Why does being Black mean a lot to one person, but very little to another? Racial identities are an integral part of our self-concept, but are shaped within societal understandings of race, identity, and inequality. In places like the United States, our racial identities become a primary social category for us, shaping how we see and act in the world. This spark seminar will provide an interdisciplinary approach, reading from psychology, sociology, history, and black studies, to understand and explore Black racial identities in the United States and around the world; delving into the diversity

and beauty of blackness. By the end of the course we will have gained a more complete understanding of the leading questions, with each student conducting their own exploratory creative research project related to "what does Blackness really mean?"

SPARK 001 - Black Mirror

Taught by: Mariana Abuan, Merritt Writing Program

In this course, we will use science fiction as a lens to examine technology, its implications, potential dangers, uses and abuses, and cultural impact. We will view science fiction as not just a form of entertainment but also as a springboard for academic inquiry by examining episodes of the popular T.V. show Black Mirror as well as related texts. We will learn how to generate research questions about technology, science, and science fiction; understand and interpret written and visual texts, select and incorporate appropriate information into our own research, prepare and write successful academic papers, and present information orally. By juxtaposing fiction and real scientific and technological developments using a variety of texts (scholarly, popular, and visual), we will investigate the current, potential, and unforeseen ramifications of technology on culture and society.

In most countries, messages like these are accepted and promoted by experts and laypeople, who assume that the messages are factually correct and will result in health benefits. These messages started to appear in the 1970s and 1980s, in parallel with US guidelines advocating a low-fat, high-starch type of eating. Adherence to these messages has been relatively high but expected health-related benefits did not ensue. For example, between 1971 and 2011 in the US alone, fat consumption dropped from 45% to 34% and carb/starch consumption increased from 39% to 51% of total caloric intake, with a coincidental increase in cardiovascular disease, diabetes, and obesity. Meanwhile, the general public has been consistently bombarded with dietary messages that are contradictory and confusing: One day "eggs are deadly, the next day eggs are healthy"! This Spark Seminar puts popular dietary messages under the microscope: How well do they hold up to science? Are these messages facts or catchphrases?

SPARK 001 - The Border and Chicanx Texts

Taught by: Alicia Contreras, Merritt Writing Program

This course explores the "border" as both a concept and physical space in Mexican America. In order to examine the border's complexity, you will learn to produce and grapple with relevant research questions; write creatively and critically on the

subject; and discuss and deliberate the subject's ambiguous meaning. Such acquired skills will improve your ability to think, write, and communicate clearly and effectively, especially as you deal with a common yet contested term like the "border." This course will give you the opportunity to read and view an array of Chicana/o novels, stories, and films that contemplate the border in various ways. These texts range in setting and topic, beginning with the borderland U.S.-Mexico War of 1846-1848 and ending with the contemporary city life of a Mexican daughter trapped within her family's borders. To enhance your analytical skills, you will also read critical essays on how the border functions interculturally and intraculturally, as both a physical space of conflict and potentially ideological place of healing. Finally, this class will equip you with the intellectual tools needed to investigate and understand how the border or the "wall" exists, changes, and persists in American politics and society today.

SPARK 001 - The Built Environment

Taught by: Matthew Nye, Merritt Writing Program

This course asks how the built environment communicates cultural values. Students will analyze both real-world architectural case studies alongside representations in literature and film to understand the aesthetic, ethical, political, and cultural desires underlying our buildings, cities, and infrastructure. Students will learn to read the ways that space shapes behavior, community, and cultural memory. Topics may include: sustainability, gentrification, environmental racism, memorial architecture, etc. In this experiential and interdisciplinary seminar, we will read theoretical texts as well as experience architecture directly to deepen our understanding of the interface between humans and our built environments.

SPARK 001 - California: Our Common Cause

Taught by: Angela Winek, Merritt Writing Program

As currently living in California is something that UCM students share, students in this class will learn how to generate research questions and conduct research related to the state of California, examine historical and current California events from a diversity of disciplinary perspectives, evaluate sources addressing California from the free web and academic journals, and produce professional rhetoric (narrative, visual and oral) in order to generate an academic argument related to California. In order to meet these goals, students will read assigned articles related to seven guiding themes of California, select and evaluate articles related to the course topics, develop a collaborative research project culminating in a final proposal and presentation, and maintain an on-going related research log. The

course will be organized around seven guiding themes related to California: Cultural and Linguistic Diversity, Environmental Legacy, Political Powerhouse, Economic Driver, Engineering Prowess, Artistic Expression, and Regional Divides. In addition to addressing these important California topics from both historical and modern perspectives, students will identify and research a specific problem that California currently faces and pose potential solutions for the problem, based upon research from a variety of disciplinary perspectives.

SPARK 001 - Cannabis, Culture, & Health

Taught by: Rudy M. Ortiz, Molecular Cell Biology

Over 20 states now legally permit the use of cannabis for recreational and medicinal purposes. While cannabis use was stigmatized for decades in many cultures, it was used in very early cultures around the world for these same purposes. However, the recent advent of expanded research on the medicinal use of cannabis has changed its perception among many cultures and society. We will examine and discuss the early history of recreational and medicinal cannabis use, its perception among different cultures including its depiction in media, its medicinal use, and integrate how these areas have been integrated to help shape our current views around its use.

SPARK 001 - Central Valley Stories

Taught by: Dawn Trook, Merritt Writing Program

Becoming acquainted with the diverse communities in the Central Valley can help develop an appreciation of the rich history of the area and an understanding of the differences within the broader communities. Likewise, helping others tell their stories can create a sense of empowerment in a community. This seminar will help students engage Central Valley residents in telling their stories. Students will work in collaboration to choose a community and interview community members. Then, students will write research journals, develop character sketches, and create a creative response to what they learned about the community members they interviewed.

SPARK 001 - Climate Justice

Taught by: Tracey Osborne, Management of Complex Systems

Drawing inspiration from a long history of social justice movements, this course hopes to educate a new generation of climate justice changemakers. This transformative, interactive educational experience centers around equity with a

holistic systems perspective. Systems thinking allows us to envision the larger system changes we need to make in order to adequately address the climate crisis. Through pre-recorded lectures, students will learn directly from faculty from all across the state of California who are experts in their fields. In addition, students will engage with readings and multimedia content designed to deepen their understanding of the most pressing issues and solutions related to climate change. Students will meet in person three days a week to discuss course content and to work in groups on a climate justice research project. Because facing the realities of climate change can induce intense emotions, this curriculum includes awareness-based practices, allowing students to experience the materials in ways that engage them both intellectually and emotionally while reinforcing their capacity to make change. Thus, space will be made for students to reflect and journal, giving them time to process and retain these different forms of knowledge, as well as opportunities to dialogue with peers and build community and agency around equity and holistic systems change.

SPARK 001 - Comic Art

Taught by: Karl Ryavec, Anthropology and Heritage Studies

This seminar examines American Comic Art in Newspaper Strips and Comic Books over the course of the twentieth century. The focus will be on the artistic techniques and styles developed by key artists to depict and comment upon social issues in American society through different genre such as Superhero, and Comedy. Short weekly essays will be required interpreting how Comic Art relates to its historical and social contexts, with a focus on the so-called Golden, Silver, and Bronze Age periods, and their divergent Underground Comic movements. Class discussions will revolve around the weekly readings. The main goal of the seminar is to introduce first year students to the importance attached to discussion and writing in academia, and to help students develop and improve their own writing styles through feedback on the weekly essays, and related literature searches, and citation methods. These efforts will see fruition in a final research paper on a specific topic of interest to each student.

SPARK 001 - Community Mapping

Taught by: Mary Soltis, Merritt Writing Program

A key to understanding the intricacies of any community happens through exploration and interaction. In this seminar, students will have opportunities to interact with community members through Community Mapping, an inquiry-based method of collecting, analyzing, and understanding resources and artifacts within a

chosen community. Students will become "mappers" to discover, gather, and analyze a variety of resources in a specific geographic location while developing a new understanding of the cultural practices and those resources that make up the community. Students will learn and use various mapping techniques, and in collaboration with community partners, will develop research questions within their field of study to better understand the challenges that communities experience.

SPARK 001 - Computers and Education

Taught by: Angelo Kyrilov, Computer Science & Engineering

This seminar will explore different issues related to the use of computational technology in the instructional process. We will survey existing literature to learn how instructors from different disciplines use computers in their classrooms to improve their teaching, and explore the effects this technology has on things like student performance and motivation. Each student will identify a research question from their own field and develop the proper research methods to answer it. This will involve writing a research proposal in the early stages of the seminar, and producing a research report by the end.

SPARK 001 - Confronting the Urban Century

Taught by Tommy Tran, History, Critical Race and Ethnic Studies

By the middle of this century, the majority of the world's population will be living in urban or urbanizing regions for the first time in world history. Aside from serious environmental fallout, which we are already experiencing in the form of air pollution and water and soil contamination, the demographic shift brings many new uncomfortable realities such as heightened economic inequality and rising social tensions. How are we to prepare ourselves for this new reality and confront the many challenges that will come in the next few decades? How can we develop our own creative solutions to address the failures of urban development? What kind of cities do we want to live in? This introduces students to the various interdisciplinary possibilities for studying and researching cities from traditional archival and library research to more recent applications of historical scholarship, cultural geography, GIS (geographic information systems), and urban studies. This course also invites students of all backgrounds to consider how to best use their own experiences and majors to contribute to the ongoing urban debates.

SPARK 001 - Consumption and Sustainability

Taught by: Martha Conklin, Environmental Engineering

Surviving in today's world means consumption of goods and services. Decisions that we make can have negative consequences on environmental and social systems. These decisions will be become more critical as the human population grows to nine billion, particularly in our time of climate change. This course uses an environmental and sociological lens to evaluate the consequences of our consumer economy. We will use environmental science to provide insight into changes to the Earth system due to our consumption and we will use social science to understand the patterns of consumption and how resource extraction affects social sectors.

SPARK 001 - The Creative Process

Taught by: Christopher Viney, Materials Science and Engineering

Technological innovation and artistic creativity are rooted in common ground. We will explore how successful engineers, scientists and artists, from various cultures and at different points throughout history, transformed society by communicating and/or implementing good ideas. We will learn techniques for maximizing inspiration, with a particular focus on the inspiration provided by nature. We will practice essential library and internet skills for collecting and organizing the background information needed to support creative projects. The roles of peer-reviewed publication, copyright, and patents in protecting intellectual property will also be addressed. Assignments will include identifying everyday irritations that might be solved by a simple gadget or a clear message, and then devising solutions that are communicated through discussion, writing and digital photography.

SPARK 001 - Criminality and the Detective

Taught by: Ryan Page, Merritt Writing Program

In this course, students will read and analyze works encompassing the history of the detective fiction genre and its precursors, from the eighteenth century to the present. In examining these texts, we will be exploring the historical development of this generic cultural form, studying the components of this form, and especially considering the target audience or readership for such works. Students will then be asked to contextualize these fictional narratives by researching the historical circumstances surrounding the production of such works, including the development of modern law enforcement agencies, actual criminal cases, and the evolution of sociological theories about crime and criminals. Given the continuing popularity of the detection crime genre in contemporary media, we will obviously be addressing the reasons for the success and durability of these sort of stories, but the particular focus of our work in this course will be on the nature and attributes of the criminal (the detective's nemesis) in the genre. How, in the very

particular species of crime fiction called the detective story, is criminality envisioned, in terms of class, gender, ethnicity, and volition? What is the relation of these features of the criminal to the detective? Or to the reader? Or, especially interestingly, to the projection of the author? As G. K. Chesterton once claimed, "the criminal is the creative artist; the detective only the critic."

SPARK 001 - Crochet and Hyperbolic Geometry

Taught by: Yue Lei, Applied Mathematics

Do you know that you can learn higher mathematics through crocheting? In this course, students will explore different representations of mathematical concepts and theory, and how those representations may aid the study of mathematics. Among other activities and topics, students will crochet several hyperbolic planes and pseudo-spheres, and use these crocheted models to study hyperbolic geometry in contrast to Euclidean and spherical geometries. Students will also research connections between mathematics and other areas of human endeavor, such as arts and crafts, architecture, navigation, etc., and write an expository paper on a topic of their choice. No prior crochet skills or knowledge of hyperbolic geometry is necessary.

SPARK 001 - Cybersecurity and Data Privacy

Taught by: Lisa Yeo, Management of Complex Systems

This seminar will introduce you to the issues of cybersecurity and data privacy as they relate to individuals, organizations, and society. We will begin with a survey of relevant literature, identify new areas for examining cybersecurity and data privacy, develop individual research projects, and share our findings with each other. You should develop not only an awareness of the role technology plays in our lives, but also develop strategies to make informed decisions about the use of data in organizations.

SPARK 001 - Data Science

Taught by:_Florin Rusu, Computer Science & Engineering

This seminar introduces students to the principles of data science by following a practical approach. The seminar is a hands-on lab where data science methods are presented theoretically and implemented in a programming environment. The programming language is introduced in the first lectures. The seminar consists of a 2-3 hour lab session per week, with a different topic presented each week. Topics

include classification, recommendation, prediction, anomaly detection, simulation, geospatial and temporal data analysis, etc.

SPARK 001 - Defining a Generation

Taught by: Angela Winek, Merritt Writing Program

Promoting cross-generational awareness, students in this class will learn how to generate research questions related to generational studies, examine the history of American generations from a diversity of disciplinary perspectives, analyze data pertaining to different American generations, and evaluate the benefits and nuances of the classification and stereotyping of generations, in order to generate academic arguments pertaining to generational studies. To meet these goals, students will read and analyze articles, from a variety of disciplines, related to the six American generations (starting at the onset of the 20th Century), conduct formal interviews and surveys (resulting in brief reports) of community members from a diversity of generations, develop research questions culminating in a final presentation. The course will be organized around the six American generations: GI Generation, Silent Generation, Baby Boomers, Generation X, Millennials, and Generation Z. In addition to examining statistical data, historical significance, noteworthy contributions, and stereotypes of the seven generations, students will identify research questions and research a specific topic related to generational studies, based upon their own interests.

SPARK 001 - The Digital Age

Taught by: Elizabeth Cunningham, Merritt Writing Program

In 1991, less than half a percent of the world's population were online. Two decades later, nearly half of the world's population use the internet. The changes brought about by this Digital Revolution have informed nearly every aspect—economic, relational, educational, creative, spatial—of our lives. While the internet is still relatively young, its historical impacts are indisputable. This course will examine those impacts, and the ways in which the Digital Age shapes our self-definition. We will examine issues related to access, privacy, information overload, automation, and digital literacy. Students will monitor their own digital consumption throughout this course, and will develop a final research project based on independent scholarship.

SPARK 001 - Discourses of Normalcy

Taught by: Susan Bohrer, Merritt Writing Program

In this course students will explore the construction and representation of diverse identities, by questioning the cultural, social, political and scientific depictions of difference to establish what is "normal". Through texts and images, including popular films, students will gain a better understanding of the relationships between race, ethnicity, gender and disability as these identities are influenced by labels and standards. In addition, students will consider how these norms may marginalize individuals and groups. Students, by engaging with different disciplinary approaches to the concept of identity, will actively participate in discovering and confronting the problematic nature of their own identities.

SPARK 001 - Disease, Medicine, and Stories

Taught by: John Hundley, Merritt Writing Program

From a variety of perspectives, narrative is the means by which both physicians and patients understand disease. In this course, you will research, read, and compose narratives concerning illness from both clinical and personal standpoints. In doing so, you will consider historical views, such as John Snow's discoveries in London's 1854 cholera outbreak, contemporary social perspectives, such as the current opioid crisis, as well as non-western understandings of illness and curing from Hmong, Miwok, and Mayan cultures. Additionally, you will conduct research using library database resources as well as websites such as the Center for Disease Control and the World Health Organization. Class work also includes in-class assignments, quizzes, and two oral presentations. By examining the topic of disease through a narrative lens, you will come to a broader and more carefully considered understanding of the role of disease in life and society.

SPARK 001 - Do Africans Speak Spanish?

Taught by: Cristian Ricci, Literature

You know that Spanish is spoken in the Americas and Spain. However, do you know that at least 4 million Africans speak, read and write in Spanish in Africa today? Do you know that Spanish is the official language of an African country (Equatorial Guinea) and that in another country of Africa, Morocco, a person can complete their entire education in Spanish, from kindergarten to college? In this seminar, we will explore this understudied phenomenon through novels and films. This seminar will provide a panoramic view of historical, literary and artistic expressions from Afro-Hispanic authors and artists. This seminar will emphasize critical race theory, postcolonialism, postmodernity, subalternity, cultural difference, and globalization. Course will be taught in English.

SPARK 001 - Dungeons & Dragons Skills IRL?

Taught by: John Bultena Merritt, Merritt Writing Program

In this course, you will learn how to generate research questions related to role-playing games, utilizing Dungeons & Dragons as a focus, practice strategies for understanding texts and rules systems, how role-playing games develop collaboration, how to use composition as a tool for exploring and learning, methods for improving your ability to write successful academic papers on any subject, applications for mental health, and improve oral delivery skills. To accomplish these goals, you will examine Dungeons & Dragons and articles about it, keep up with contemporary news regarding Dungeons & Dragons, be aware of skills developed through Dungeons & Dragons, and use collaborative play and narrative generation as a method for learning. In addition, a consistent and constant concern throughout the class will be the skills that role-playing games develop that can be deployed in academia.

SPARK 001 - The Dynamic Aesthetic

Taught by: Vanesha Pravin, Merritt Writing Program

How do you take an idea from conception to live performance? How can sensation inspire the genesis of a creative work? How does this work evolve during the incubation stage? In this course, we will investigate the dynamic aesthetic experience by examining a wide range of sources (plays, poems, interviews, live performances, performance art, short films, plastic arts, video archives, diaries, and articles) in order to both produce original creative material (micro-plays and poems), and to subsequently perform these works. There will be a dual focus on theater and poetry, with an emphasis on creative inquiry as praxis. We will also examine various methods of synthesizing research into a creative work. During the semester, we will draw inspiration from primary and secondary sources as well as conduct field research to create original work. In addition, since both playwriting and poetry are forms of oral art, we will explore oral interpretation and phonology to sensitize you to the textures of human language that are more pronounced in the human voice than in the written word.

SPARK 001 - The Economics of Globalization

Taught by: Jesus Sandoval-Hernandez, Social Sciences and Management

Economic Globalization is broadly defined as the interdependence of world economies resulting from the growing scale trade of commodities and services, international capitals flows, and rapid spread of technologies. For more

than fifty years, the process of globalization has profoundly changed national economies and international relations. Globalization has enabled many regions of the world to emerge from underdevelopment, as well to boost world production and lower prices. However, recent political developments in several parts of the world suggest a backlash against globalization. The rise of nationalistic movements constitutes a trend towards more protectionism and isolationism. The debate on the economic benefits of this process and on its negative effects has been a constant in the past, but recently has intensified. The course provides with an introduction to key aspects of economic development and basic economic analysis to explain the globalization phenomena. We will review the past waves of economic globalization and their setbacks to understand the current globalization process. Then, we will study these aspects of economic globalization: global trade, international financial integration, foreign direct investment, the role of multinational corporations, regional agreements, and international institutions. Students will examine real-world case studies which illustrate international market integration. Students will also be exposed to Economics methodological tools. This Spark Seminar will challenge students to discover the global chain of economic relationships that affect their everyday lives. What they will find is that their daily milk involves a lot more than just cows and that their Smart Phones are incredibly multicultural. The course will encourage students to critically advance the globalization debate beyond the talking points of "globalists" and nationalists."

SPARK 001 - Economics of Immigration

Taught by: Gregory Wright, Social Sciences and Management

In this course you will learn about the impact that immigrants have on labor markets and communities and will learn how to apply this knowledge to generate empirical research questions related to immigration topics. Along the way you will learn to design an empirical research project, collect and work with large datasets obtained from a variety of public data sources, implement a research design and write an academic-style research paper. We will explore the current scientific literature on the impact of immigration on local economies and communities within the context of current public debate surrounding the topic.

SPARK 001 - Economics of Innovation

Taught by: Justin Hicks, Social Sciences and Management

Students will be introduced to fundamental ideas of economic tradeoffs, costs and benefits and value creation. We will then journey into how entrepreneurs convert ideas into salable actions or products, and how capitalism puts into place real

incentives to innovate to try to produce profits. We'll talk about economic measures and the goals that policy makers put into place, and the intended versus unintended consequences. We'll talk about economic growth and how natural resources are viewed and used as a result of prior schools of thought and resulting policies. Finally, we'll delve into why new ideas come into being, and how those new ideas flow around the globe, much like a neural network. This will set the stage to talk about how innovation can be classified, and whether innovation is a fluid phenomenon or rather, a step-wise phenomenon.

SPARK 001 - Economics through Sports

Taught by: Jason Lee, Social Sciences and Management

Economics is about how individuals and firms make decisions under uncertainty and scarcity. Sports provide a rich variety of examples and data that can be used to test existing economic theories. This Spark Seminar will introduce students to a selection of research topics in economics that use sports as a laboratory and introduce students to the rich data sets available in sports. Some of the topics to be discussed include how player salaries are determined and how they relate to player productivity, look at wage discrimination in sports based on race and gender, the costs and benefits to cities in building sports stadiums or hosting major sporting events, and examine the value of college athletic programs to both the university and student athletes.

SPARK 001 - Education and Democracy

Taught by: Toby Napoletano, Philosophy

The philosopher John Dewey argued that the function of an educational system is to reproduce and to improve on the values and culture of a society. This function is particularly important in a democracy, where the citizens play a very direct role in shaping the political landscape of that society. Given this important function of education, what does a good education look like? To what extent do our current educational institutions line up with an ideal education? What should we do differently? This class will explore these questions, critically examining the relationship between education and democracy, and the state of our current educational system. One assignment for this course will have students develop a core curriculum proposal for grade school, high school, or college.

SPARK 001 - Education and Identity

Taught by: Derek Merrill, Merritt Writing Program

This class will explore the intersections between learning and identity formation. Specifically, it will inquire how our desire to learn transforms our sense of self. We will learn how to generate research questions based on our learning experiences at UCM and through considering how cultural, linguistic, and socio-economic background shape these experiences. Some questions we will explore to generate research topics are: Who are we in the classroom? Who are we outside the classroom? What, if any, is the gap between these two identities? Which one feels more authentic and why? We will read essays, short fiction, theories of the self, and watch short documentaries about people who have been challenged to feel a sense of belonging in higher education as a means to investigate how desire bridges this gap. Desire in this context refers to the human drive to feel "complete."

SPARK 001 - Engineering and Society

Taught by: Alejandro Gutierrez, Mechanical Engineering

How were the pyramids of Egypt built? What do tea kettles have to do with modern civilization? Will we ever take holidays to the moon?. These and many other questions can be answered by studying engineering. In this course, students will learn what the discipline of engineering encompasses and the roles engineers play in the functioning of society. By researching and analyzing significant works of engineering from different historical, geographical, and cultural contexts, students will gain understanding about the diversity of problems engineers encounter in real life. Students will discuss the various impacts engineering has in society and the techniques used to manage these impacts.

SPARK 001 - Engineering Inspired by Nature

Taught by: Sachin Goyal, Mechanical Engineering

If birds didn't exist, would engineers ever conceive of inventing a plane? Nature has evolved over geological time scales to achieve such intriguing mechanisms that engineers strive to learn from even today to develop new technologies. In this seminar course, you will brainstorm and investigate how nature can inspire engineering research. We will explore cutting-edge examples of such research from within UC Merced and beyond. Can we surpass nature in our engineering designs? Do we really understand how nature has solved a specific engineering problem? These are the types of questions that we will debate in the context of those research examples.

SPARK 001 - The Eternal Question

Taught by: John Haner, Merritt Writting Program

"The Eternal Question—Science, Cosmology, and UFOs," will take a multidisciplinary approach to analyzing one of the greatest questions in the history of humanity are we alone in the universe? With recent revelations of UFO sightings from the US Pentagon, and front page articles in the New York Times, a study of the ramifications and significance of this question is timely and compelling. What would it mean for humanity to not be alone in the universe? What can we learn about ourselves? Is "ufology" a new religion? What can we learn about technology, innovation, and theoretical physics? How does this topic put mirrors on the "ways of knowing" that are the academic disciplines? This course will begin with epistemological questions of how we know what we know, with readings from Descartes and Kant. We will look at the question of "ufology" from the perspective of religious studies, with readings from William James, Giordano Bruno, and American Cosmic, by UNCW professor D.W. Pasulka. We will consider the question from the lens of the social sciences, with statistical research from UC Irvine Professor Jessica Utts, and Harvard Professor John Mack. We will look at how the humanities contend with UFOs as a topic of exploratory research and as a vibrant market for science fiction. Our look into the "hard sciences" will contend with aspects of theoretical physics and quantum mechanics, with a discussion of the theory of the universe as a hologram, with readings from UC Irvine Professor Donald Hoffman, a study of UFO flight characteristics by University of Albany Professor Kevin Knuth, and physicist Miguel Alcubierre's gravitic propulsion model. This course will circumnavigate this eternal question with a multi-lens examination that should yield engaging discussion, analysis, debate, and speculation. Students will create a research question consistent with their intended fields of study, and produce a presentation and a research paper studying their chosen topics.

SPARK 001 - Ethnography and Innovation

Taught by: Tea Lempiala, Management of Complex Systems

In this seminar, you will explore with conducting ethnographic studies and observing real-life situations in an analytical manner. Through this exploration, as well as course materials and discussion, you will gain insight into what kind of value ethnographic methods can offer in various disciplines. Ethnography refers to the systematic study of culture and people. The primary goal of ethnography is to understand why things are done the way they are, and what social rules human behavior follows. While conducting ethnography the researcher aims to "make the familiar strange", which means that s/he questions the taken for granted rules of our social life. Ethnography has its roots in anthropological studies, but ethnographic methods are nowadays used in various disciplines, such as organization studies, technology studies, and consumer research. We will

particularly think about applying ethnographic methods to research questions related to innovation, sustainability and technology, while all disciplines are welcome. During the seminar, students choose an issue they are passionate about and conduct an ethnographic research project on that topic. The aim is to challenge some relevant assumptions in that topic area, and to come up with novel perspectives and solutions to a current problem found in that domain. More generally, we will think about how ethnographic approaches can help develop better solutions and discover relevant problems. Training the ethnographic approach will provide you with a lens you can utilize in your later studies – and life in general. Be prepared to discuss, reflect and try out becoming an ethnographer and innovator!

SPARK 001 - Evolution of Electronics

Taught by: Sushma Shrinivasan, Bioengineering

If we look around us, most gadgets and devices that play an almost indispensable role in our everyday life are built on electronic technology. This ranges from simple calculators to complex medical equipment such as an electrocardiogram. As the world gets more and more automated, the footprint of electronics keeps becoming larger. This seminar will provide a historical perspective (worth more than 100 years) of the evolution of electronic devices beginning from the invention of the vacuum tube (by J. A. Fleming) in 1904 to today's cutting edge inventions in microprocessor technology that will find its way into our society in the near future. Several electronic systems will be provided as examples throughout the course, including applications where the role of electronics is sometimes not so obvious. The trajectory of future electronic research will be discussed based on current needs and constraints. Contact activities for the course will include group discussions and hands-on activities using basic electronic components that will help students learn to perform basic experiments, collect data, analyze and present them in a suitable form. Students will also be required to write a research paper on an electronic technology of their choice (with inputs from the instructor). As part of this assignment, they will be required to read and understand relevant literature, identify significant research questions, propose potential solutions (if possible) and present them to a general audience (in both oral and written form). The students will also gain experience in critiquing their peers' work through the peer-review of the research paper and the presentation.

SPARK 001 - Exploring Leadership

Taught by: Charles Nies, Student Affairs

This seminar will introduce students to theories and models of leadership. Through a review of leadership literature, an interview with a community leader, and reflection on how theory and lessons learned frame the students' understanding of their personal capacity for leadership. Additionally, the link between community engagement and leadership will be explored as students volunteer in the community and develop a proposal for a community-based project. Finally, students will use various disciplinary lenses to look at contemporary issues that shape and impact the ability to effectively lead and to create positive social change.

SPARK 001 - Exploring Metafiction

Taught by: Ben Pageler, Merritt Writing Program

Students will be given an initial, very minimal, definition of metafiction and illustrating examples. This will be the example of 4th wall-breaks popular in modern TV and film. Students will then find their own examples of 4th wall breaks in media before going on to explore more elaborate definitions of metafiction. Students will add single new mechanisms for making metafiction each week. They will, over the term, systematically be exposed to and add accepted examples of metafiction, each time finding their own examples of each type. All of this will culminate in students composing their own metafiction piece (written story, film-media based metafiction, or other). So, the semester will start first with one device or another and then have students explore various mixtures of metafiction devices as they flesh out a simple definition into something that would encompass all examples given. At the end of the course, students will attempt to formulate or critically reflect on a general definition of metafiction while also polishing earlier work into a finalized form or making a new creative final piece. The conceptual and creative will be integrated within this ground-up exploration and self-constructed student understanding of metafiction. I have significant knowledge about the philosophy of self-referential logical systems (e.g. Godel's proof of the incompleteness of mathematics). The defices of metafiction all make reference to the notion of fiction or to the token example of fiction they are currently in. Studying these various self-reference mechanisms in the guise of metafiction will not only expand the logical sense of how self-reference is accomplished but also how philosophical and logical devices and literature and film make contact with one another. (I have also composed a metafiction novel - "The self as the thing wandering through itself looking for itself")

SPARK 001 - Exploring the Sky and Stars

Taught by: Venkattraman Ayyaswamy, Mechanical Engineering

Humans have always been interested in knowing more about the vast open space above us. While early studies on space utilized a telescope to understand the dynamics of celestial bodies, we have evolved a long way with our ability to observe other planets and their satellites from close quarters. This seminar course aims to introduce the beginner to star-gazing and space exploration along with a historical perspective. Specific topics covered in the course will include a description of what we observe in the night sky (including the moon, stars, planets and constellations) and how they change with seasons. Other topics covered will also include past, current and future space missions spearheaded by various agencies around the globe. Contact activities for the course will predominantly include group discussions and video demonstrations of topics relevant to space exploration. Students will also be required to write a research paper on a related topic of their choice (with inputs from the instructor). As part of this assignment, they will be required to read and understand relevant literature, identify significant research questions, and present it to a general audience (in both oral and written form). The students will also gain experience in critiquing their peers' work through the peerreview of the research paper and the presentation.

SPARK 001 - Of Explorations and Insights

Taught by: John Hundley, Merritt Writing Program

Travel is more than simply the physical movement from place to place. Travel involves outward exploration of the new as well as inward reflection and insight. In this course, we will engage with the concept of the journey, the quest, from a variety of perspectives: temporal, spatial, historical, futuristic, mythological, psychological, and metaphorical. It's going to be quite a trip. We will explore the dimensions of travel through visual and written texts, a variety of responses, discussions, a local field trip, one synthesis essay, and a "travelogue"-style class presentation featuring you as our guide. Since the idea of the quest implies a guiding question, we will investigate and develop research questions to use like a compass as we make our way.

SPARK 001 - Feminism, Handmaid's and Wild Seeds

Taught by: Michelle Troconis, Merritt Writing Program

Margaret Atwood's "The Handmaid's Tale" and Octavia Butler's "Wild Seed", both from the genre of speculative fiction, serve as the basis from which we will examine oppressive systems, the state of being other or different, and marginality, particularly along the lines of gender and race; in addition, these texts offer alternative ways to think about self, the capacity to act independently and to make

one's own free choices, as well as the means one has to determine their own actions.

In this course, students will learn how: to take the controversies raised in speculative fiction, alternative versions of the past or projections of the possible future, from the "The Handmaid's Tale" and "Wild Seed" to draw parallels and/or generate real-world research questions, identify problems, and formulate tentative solutions; students will practice the use of multiple interdisciplinary analytical tools to identify, interpret, and evaluate texts and various information; students will work independently and collaboratively applying their research and analysis using written, visual, and oral modes of communication to convey ideas; and students will learn to identify the ways in which cultural, political, economic, technological, and environmental dimensions of society interact understanding that conflict is inherent and welcome in diverse learning communities.

SPARK 001 - Film and American Culture

Taught by: Justin Gautreau, Merritt Writing Program

This course explores the phenomenon of popular film in the United States. Rather than viewing movies as mindless entertainment, the course approaches cinema as one of the most powerful arbiters of mass culture in U.S. history, shaping perceptions of gender, race, class, and sexuality for nearly a century. By learning to identify the "invisible" elements of the classical Hollywood style, students will study American film's historical tendency to naturalize structures of power within its narratives. At the same time, however, the course will encourage students to recognize the way Hollywood films can sometimes challenge dominant ideology. To this end, students will practice reading and writing about popular film (and thus popular culture more broadly) against the grain while also examining the significance of its historical context. Students will leave the course with a more sophisticated awareness of not only their own media-saturated landscape but also its role in shaping their identities.

SPARK 001 - Film Noir

Taught by: Justin Gautreau, Global Arts, Media and Writing Studies

Throughout the 1940s and 1950s, what we now call film noir worked to counter the bright optimism of classical Hollywood cinema. Such dark perspectives often walked a fine line between the mainstream and the subversive. This course will explore the historical contexts, techniques, and trajectory of film noir with an emphasis on its relationship to and representation of Los Angeles and the film industry. To this end, students will learn how progressive filmmakers carefully

navigated the studio system's political infrastructure to expand narrative cinema's critical capacity. Students will then spend the second part of the semester examining neo-noir in the era of New Hollywood to consider the fundamental question: Did noir die with the studio system or does it live on in our contemporary moment? Ultimately, the course will invite students to think about dominant culture's tendency to absorb its own critique. Assignments include a short paper, an in in-class midterm, and a final research paper.

SPARK 001 - Flesh & Bone: Forensic Science

Taught by: Christina Torres-Rouff, Anthropology and Heritage Studies

This course is an introduction to the broad and varied fields in the forensic sciences with an emphasis on forensic anthropology – the application of the theory and methods of biological anthropology to the legal setting. Students will be introduced to human osteology, the techniques and underlying theory used by anthropologists to recover skeletal remains, reconstruct a biological profile from the skeleton, interpret skeletal trauma, and assist in the identification process as well as developing an introductory understanding of the forensic setting. We will highlight the integration of this osteological evidence with other forensic disciplines related to human identification and death investigation, including crime scene investigation, forensic pathology, odontology, entomology and other lab-based forensic science fields.

SPARK 001 - Food Deserts in Merced

Taught by: De Ette Silbaugh, Merritt Writing Program

In this course, students will look at the impact of food deserts in the City of Merced. Students will engage in their own narrative in relation to food, will learn how to negotiate demographics and statistics, will understand and participate in research, and will be able to determine reliable sources and utilize information within the context of their communication, while improving their ability to read, write and think critically in an academic environment. To accomplish these goals, students in small groups will consider food deserts from a myriad of disciplines by reading about different causes and solutions, analyzing and synthesizing written material and drawing questions and connections from a variety of sources. By the end of the semester, students will have considered multiple directions to view a single [yet diverse] issue impacting the world today. Students will have also learned and appreciated different points of view by sharing research, synthesizing information and researching potential answers to questions they develop from their findings and ultimately sharing this information in collaborative

presentations. In addition, students will not only become familiar with looking at issues from different presentations, but individual and group responsibilities, time management, respect for others and voicing their opinions and listening well to others. And perhaps the most important is realizing their individual stake in being good guardians of our earth.

SPARK 001 - Gaming the System

Taught by: Heather Devrick, Merritt Writing Program

Games are nearly cultural universals. This course examines the cultural and historical background of games with an emphasis on game development and play in contemporary Western Culture. The course will also introduce students to theories of game play and its importance in the human experience. Students will examine various game genres and styles of game play, such as such as tabletop, role-playing, and video games. Students will also consider how game goals reflect cultural values. The course will require the analysis and deconstruction of games from a variety of critical perspectives. Students will also collaboratively research and design their own game.

SPARK 001 - Global Grand Challenges

Taught by: Valerie Leppert, Materials Sci & Engineering

Humanity faces a myriad of critical challenges to tackle in order toimprove and even sustain life globally. In this course, we will examine the central issues and solutions for 14 Grand Challenges - grouped into the thematic areas of sustainability, health, security and the joy of living- that have been identified by the National Academy of Engineering as some of the most pressing issues facing society in the 21st century. Although the NAE Grand Challenges are taken as a starting point for discussion of viable approaches to global problems, this is not an engineering course. We will examine challenges using the knowledge, research methods, and perspectives of the natural sciences, social sciences, humanities and arts, in addition to engineering. We will develop an appreciation for the important role that the basic sciences, economics, policy, culture, communication and technology all play in understanding and tackling global challenges. Course activities will include reading academic sources and the popular press, viewing video presentations, participating in classroom discussions and debates, writing exercises, and a final research paper and oral presentation related to a specific Grand Challenge.

SPARK 001 - Growing up Chicano/a

Taught by Alicia Contreras: Global Arts, Media and Writing Studies

This course explores Chicana/o growing-up narratives and encourages students to grapple with the meaning of ethnic and cultural upbringing in the United States. In order to examine these narratives' complex dealings with both formal (school) and informal (home) education, you will learn to generate and investigate relevant research questions; write creatively and analytically on the subject; and discuss and deliberate the subject's significance. You will read Chicana/o growing-up narratives that range in genre and include a mix of novels, short stories, poems, and plays. Similarly, these narratives will range in content, beginning with a boy navigating a poverty-stricken South Texas during the Depression and ending with a modern girl struggling with teenage pregnancy in the U.S.-Mexico borderlands. To enhance your analytical skills, you will also read critical essays on the purpose and function of Chicana/o growing-up narratives, especially as they simultaneously emulate and reject the more formal "bildungsroman" structure and contemplate Americanization processes. As such, you will be able to parse the ways these narratives articulate both tensions and/or reconciliations between dominant and minority cultures, and formal and informal types of education. Above all else, this course will encourage you to reflect on how Mexican-Americans experience diverse ways of learning and seeing the world both within and well beyond the U.S. education system.

SPARK 001 - The Hidden Curriculum

Taught by: Amanda Mireles, Sociology

Colleges and universities today are enrolling a growing number of first-generation college students. This seminar will require that students reflect deeply on social and cultural issues exacerbating inequality on college campuses. Our first goal is to shed light on the unwritten and unspoken knowledge and skills that matter for student success but are not explicitly taught—the hidden curriculum. We will begin by exploring practical advice and tips for navigating classroom expectations for the first time and offering a behind-the-scenes view of the knowledge and skills social science students increasingly need to succeed in college and the labor market. Our second goal is to understand how first-generation students experience academic communities and campus life. To do this, we begin by examining the research and theory on first-generation college students and discourse around identity and experiences of first-generation college students. Next, we investigate how efforts made to expand access to higher education impact students' sociocultural sense of belonging and academic performance, as well as their future academic, personal, and labor market trajectories. By the end of the semester students will have

conducted preliminary research to gain a greater understanding of and awareness about the identity and experiences of first-generation college students. Students will then be challenged to use this new knowledge to create a research-based informational video aimed at further developing or redesigning a program or policy to reduce existing inequities on college campuses.

SPARK 001 - Horror Literature

Taught by: Jordan Dakin, Global Arts, Media and Writing Studies

This seminar functions not only as a survey of the horror, gothic, and weird fiction genres, but also as an interdisciplinary exploration into why we fear what we do. What biological factors and shared social or cultural anxieties serve as the driving forces behind our attitudes towards concepts like fear, death, and the unknown? How do stories from horror's more nontraditional voices contribute to a broad and diverse range of social and cultural anxieties, and how are these anxieties reflected within their work? Together, we will apply a variety of critical lenses to these works in an attempt to understand how these authors use the weird, the revulsive, and the horrifying as vehicles for meaning-making. Furthermore, we will explore what these works can tell us about the world we live in, and how we, as responsible citizens, navigate and respond to our shared social and cultural anxieties.

SPARK 001 - How Math Will Save the World

Taught by: Juan Meza, Applied Mathematics

What can climate models tell us about our future? Can we predict the best course of action in a pandemic like COVID-19? How can we better understand health issues both personal and across diverse populations? Should a judge grant bail to a defendant? Can we prevent mass outages in the electric power grid? As we face today's most pressing societal problems, mathematics has taken an important role in helping us address these global problems. This course will provide a short introduction of areas where mathematics has had a profound impact on society and science. Through both simple and more powerful modeling techniques such as artificial intelligence, we will discuss how these models are being used today to help us understand problems from wide-ranging fields such as climate change, medicine, public health, engineering, and the social sciences.

SPARK 001 - Human Development: Who Are We?

Taught by: Pamelyn Gingold, Merritt Writing Program

This course will explore aspects of human development from birth to death; borrowing on the theories of psychology, social psychology, and aspects of families and societies. Topics will range from how humans attach, learn to read, make friends, develop relationships and create new families, to aging and preparing for the end of life. Students will reflect on developing identity, culture and counter-cultures. Building a classroom community by sharing stories and insights, there will be films and field trips, observation of infants, children, families, and elders. Students will choose a personal research topic (a time of life), conducting interviews and expressing themselves through art, presentations and a final research project.

SPARK 001 - Immigrant Lives in Art and Film

Taught by: Jeremy Mumford, Merritt Writing Program

This course will use art as a vehicle to explore the debate on US immigration, and examine the crucial role this issue has played in American politics. We will read short selections of immigrant memoirs, look at relevant art pieces, and view select films. The course will examine how personal life stories--as captured in art--can be the vehicle for larger social debate and change. In reading and watching texts from different time periods, students will gain an understanding of the history of American immigration, which can better inform our understanding of the current debate. In the course, we will debate issues of citizenship and the American identity, cultural conflicts and stereotyping, and discuss how race, ethnicity, and gender have factored into this debate.

SPARK 001 - Incarceration and Gentrification

Taught by: Tanya Golash-Boza, Sociology

Our understanding of urban areas is incomplete without a dual analysis of two trends that have transformed cities: mass incarceration and gentrification of the central city. In this seminar, students will read scholarly articles on incarceration and gentrification, learn qualitative and quantitative research methods to understand incarceration and gentrification, and develop research questions related to these trends.

SPARK 001 - Informal Logic and Reasoning

Taught by Ben Pageler, Merritt Writing Program

This SPARK seminar will introduce students to the nature of inquiry and argumentation by exploring various forms of inference and structures of

justification, such as deductive arguments and various forms of inductive argumentation (e.g. analogy, enumerative induction, and abduction). The topics and content of such arguments will come from multiple perspectives but the techniques use will be focused enough that students can engage with the issues of the topic in some depth. Most people are familiar with certain forms of persuasion. In today's culture students quickly become jaded against any methodology revealing 'the truth'. However, that kind of relativism has huge consequences both globally and culturally. So, as they explore this supposed division between justification and propaganda they will see its impact in every level of culture and global interaction.

SPARK 001 - Inhabiting a Historical Moment

Taught by: John Hundley, Merritt Writing Program

What was it like to be a Spanish miner in the California gold fields in 1850, showing others how to extract gold from rock? Or how about Jeanne Wakatsuki, a 7-year old riding a prison bus to the Manzanar Internment Camp at the start of World War II? Or Dolores Huerta, standing on the front line of the Delano Grape Strike alongside Cesar Chavez? Or Dr. Rupert Blue, dissecting rats during San Francisco's outbreak of plague in 1902? When history is related through character, setting, and plot, it is anything but boring. In this course we will take a quick tour of the natural, cultural, and political histories of the region once known as California Norte, now the state of California. Along the way, we will awaken our curiosity by asking researchable questions and investigating the histories relevant to a significant moment in time from the perspective of a character present at that moment. We will learn to analyze content and style of selected readings, conduct simple research in a variety of disciplines, and compose interesting and believable stories in the historical fiction genre. Bring your imagination, your curiosity, and an open mind to this multi-disciplinary, workshop-oriented course. No research or narrative writing experience necessary!

SPARK 001 - Intersectionality

Taught by: Iris Ruiz, Merritt Writing Program

This course will explore how particular social concern in the Central Valley can be better understood through an intersectional analysis. Intersectionality is one of the most useful contributions of third wave feminist theory; however, in the University, its potential application is still limited. Furthermore, intersectionality is a complex tool that requires skill and training to use. While intersectionality wields the power to help make feminism the inclusive framework it purports to be, and is a powerful

paradigm that can be leveraged in multiple fields studying and seeking to change cultures and societies, it is still not widely used beyond feminist circles. This course will further develop an intersectional approach to knowledge and research and promote your ability to apply an intersectional praxis toward research that will address the limitations of singular foci research studies. Furthermore, this course will prompt you to learn to apply a multidisciplinary, multidimensional, and multifaceted intersectional approach to local social problems in the Central Valley as intersectional theory is recognized as a viable theory for understanding multiple sources of social influence, oppression, and experience.

SPARK 001 - Intersections of Art & Science

Taught by: Susan Varnot, Merritt Writing Program

In this seminar, students will examine the cross-pollinations that occur between disciplines, in particular the marriage of science and the arts as a means of representing and communicating ideas to wider audiences and to use metaphor and analogy -- visual, linguistic, and cross- disciplinary -- to create a reflexive dialogue between disciplines to see what each has to offer the creative, thinking, and presentational processes of the other. Students will explore their personal academic interests and work with others whose interests diverge from their own to develop talks and materials to connect with wider audiences in an effort to get them to care about topics they might otherwise dismiss.

SPARK 001 - Invisible Cities

Taught by: Tommy Tran, History, Critical Race and Ethnic Studies

By the middle of this century, the majority of the world's population will be living in urban or urbanizing regions for the first time in world history. Aside from serious environmental fallout, which we are already experiencing in the form of air pollution and water and soil contamination, the demographic shift brings many new uncomfortable realities such as heightened economic inequality and rising social tensions. How are we to prepare ourselves for this new reality and confront the many challenges that will come in the next few decades? How can we develop our own creative solutions to address the failures of urban development? What kind of cities do we want to live in? This introduces students to the various interdisciplinary possibilities for studying and researching cities from traditional archival and library research to more recent applications of historical scholarship, cultural geography, GIS (geographic information systems), and urban studies. This course also invites students of all backgrounds to consider how to best use their own experiences and majors to contribute to the ongoing urban debates.

SPARK 001 - Jung, Dreams, and Mythology

Taught by: Ben Pageler, Merritt Writing Program

This course will introduce students to Jungian psychology through readings, mythology, and various dream exercises. Students will write about, verbally present and explore, and even draw/ paint various aspects of psychology and myth through the lens of Carl Jung's psychological theories.

SPARK 001 - Latin America in Film/TV

Taught by: Sabrina Smith, History and Critical Race & Ethnic Studies

This class engages students in topics affecting modern Latin America, with an emphasis on repression and resistance. Each week, we will watch a critically-acclaimed film associated with the weekly topic and compare multiple cultural representations including slave narratives, testimonial literature, fiction, revolutionary communiqés, speeches, and contemporary press. Subjects covered in this seminar include: the end of slavery, the Mexican Revolution, shantytowns in Brazil, sexuality and the Cuban Revolution, indigenous identity and environmental activism, democratic socialism in Chile, the Argentine Dirty War, Civil War in El Salvador, US intervention in Haiti, left-wing movements symbolized by the Zapatistas, Hugo Chavez, and Evo Moráles.

SPARK 001 - Living With Wildfire

Taught by: Crystal Kolden, Management of Complex Systems

Fire is a fundamental element and has been present on Earth for millennia. Human mastery of fire is one of the key pathways towards modern civilization. Today, however, wildfire is both a major natural hazard and a critical ecological process, making the way we manage it and fight it highly controversial. In this course, you will explore the science of combustion, how humans relate to fire through use of fire as a tool, and our social fear of fire as one of the most destructive forces on Earth. You will conduct basic science experiments and discuss perspectives of fire through the eyes of different land inhabitants across time. You will examine and discuss the complexities of managing fire today as ever larger and more destructive wildfires challenge traditional models of community and land management. Ultimately, you will ask what it means to live with fire.

SPARK 001 - Legendary California

Taught by: Phillip Lovas, Merritt Writing Program

In this class we will explore the politics of ethnicity, class, and gender in their social and cultural contexts through the stories we tell about ourselves and others. We will study many different folklore genres—tall tales, rumors, ethnic humor, personal experience narratives, family folklore, and urban legends—as articulations of current and historical social, cultural, and political conflict. In short, our stories provide a lens through which we can understand our society since they often emerge from social stress, anxiety, and concern. They tell us that there is something awry in our community. Students will be encouraged to collect and analyze oral narratives from their own families, friends, and communities. Analysis will consist of understanding the context, text, and texture of the item they collect.

SPARK 001 - Life & Death in the Old West

Taught by: David Torres-Rouff, History Critical Race and Ethnic Studies

Life & Death in the Old West engages critically in one of the most dynamic and elusive periods in the history of the United States. The course covers (roughly) a seventy-five year period between 1824 and 1900. Out West, "big" national events including the Mexican American War, Civil War, Reconstruction, and the Industrial Revolution intersected with urgent local concerns, particularly Indian relations, establishing law and order, community growth, and social relations. Our key questions will turn on issues of migration and conquest, identity formations (especially gender and race), violence, community, politics, and work. We will read many primary sources and a few longer academic essays and books. As we read, we will (like many Old Western residents) remain vigilant and suspicious of their content, ask questions about their purpose, and consider the politics of memory. These questions allow us to confront the Old West critically—as it was for those who lived in it and as it is in our popular imagination. We will also have fun, thinking about making new communities, playing old west games, and learning about the ways that music, clothing, and theatre shaped communities. This course is structured as a seminar. This means that, rather than a series of lectures, the course is largely discussion based. We will read primary sources, and scholarly books, and watch several films critically, all of which we will process together in weekly seminars. Students will also generate an original research topic and conduct research in digital newspaper collections as they write a paper and develop a presentation.

SPARK 001 - Life Hack: Adulting Today

Taught by: Yogita R. Maharaj, Merritt Writing Program

What do understanding debt, renting/buying property, cooking vs. eating out, getting insurance, stress management, conflict resolution, and forming healthy relationships all have in common? These are all life skills that are not explicitly taught in K-12 education, and yet are essential to living a fulfilling and productive life. The current school system does not require classes where students learn how to navigate real world challenges like paying taxes or self-care. We often enter college (and unfortunately sometimes remain indefinitely) unprepared to take care of ourselves. Many healthy habits like conflict resolution and budgeting are necessary skills that can be hard to achieve without proper knowledge or guidance. In order to bridge the gap between college and adulthood, this course will explore the complex, but manageable road to successful "adulting." This course will have students engage in discussions through shared scholarly readings, guest speakers/facilitators, and lectures. Students will actively practice adulting concepts in and outside of class, reflecting on their experiences and progress in a weekly journal. Additionally, a midterm presentation and final multimedia portfolio will examine students' mastery of key skills and concepts.

SPARK 001 - The Machine Learning Age

Taught by: Jeffrey Yoshimi, Cognitive and Information Sciences

Data science and machine learning have become pervasive features of our lives, playing a role in determining what we watch and listen to, how we deliberate, who our friends are, and in many ways, how we think. This seminar aims to empower you to understand these technologies and reason about them using the tools of moral and political philosophy. The first two thirds of the course will be a practical overview: we will get in the lab and start building machine learning models using the computer language Python. No programming ability or mathematical background will be required, but fluency with computers and technology will be extremely helpful. The last third of the course will involve reading theoretical material about data ethics, machine learning ethics, and AI ethics. The course will culminate in a project that will involve creating a machine learning model and data analysis, writing up a description of the model, assessing moral and political implications of models of this kind, and presenting the results in a brief presentation.

SPARK 001 - Masterpieces of Sufi Mysticism

Taught by: Sholeh Quinn, Critical Race and Ethnic Studies

In this seminar, students will learn how to produce academic research questions related to the study of Sufism, that rich aspect of Islamic mysticism that focuses on

the inner meanings of sacred writ. They will develop strategies for critical reading and thinking, improve their skills in academic research and writing, and develop their ability to orally present their research findings. In order to accomplish these goals, students will read, analyze, and research a number of Sufi mystical texts in both prose and poetry formats. They will also analyze visual sources, including architecture and calligraphy, and listen to and view Sufi musical performances.

SPARK 001 - Measuring Our Physical World

Taught by: Dustin Kleckner, Physics

This seminar will explore the methods by which early scientists were able to measure the basic parameters of our physical world, such as the speed of light, the mass and radius of the earth, the charge of an electron, or other physical constants. There will be a particular emphasis on the mechanics of doing scientific experiments: how do you design an experiment, build it, and interpret your results? Working in groups, we will create plans for measuring these fundamental quantities using simple apparatus and then attempt to execute one or more of them as a class. Time allowing, we will also discuss the modern descendants of these early experiments, and how we continue to refine our detailed understanding of the physical world.

SPARK 001 - Medical Physics

Taught by: Toni Stone, Physics

In this course you will learn the the physical details of recent advancements in modern physics, and their impacts on medicine, biology, and public health policy. You will also learn about the fundamental physics mechanisms underlying these breakthroughs, ways in which to quantify and analyze those mechanisms, and techniques and approaches for synthesizing these details to make meaningful quantitative predictions. These new perspectives will encourage you to ask important questions and will help you develop research questions that are important to your career and academic goals. To accomplish this you will read assigned basic physics and science literature from medical physics, biomedical and health journals, and other sources as appropriate, all of which will directly demonstrate the applications of these science advancements to modern medicine. In particular you will explore the new treatment protocols and diagnostic procedures that have resulted from these advancements. You will watch animations and simulations of the applications of important medical physics and biomedical advancements and their impacts in diagnoses and imaging, and longevity of the population. Summarizing through composition, and oral

presentations, you will develop and improve your ability for research, scholarly writing, and critical thinking and you will enhance your ability to identify the interdisciplinary nature of science, technology, and applications to modern medicine in particular and modern life in general.

SPARK 001 - Metacognition - Thinking Success

Taught by: Kamal Dulai, Molecular Cell Biology

Reflection offers one an important perspective on oneself. Metacognition is a form of reflection which offers the ability to regulate one's own thinking. Most learners are unaware of the power of metacognition until guided to reveal its full potential. Metacognition makes you smarter and more efficient. In this course, you will learn how to better think about your thinking. You will subsequently proceed to survey fellow students, by way of a standard scientific investigation, applying the skills you learn. The finding of this project shall be shared with the learning community via of a poster, video, or alternative presentation. This course shall empower you with insights into how to further not just your own metacognition prowess, but to share with peers. The benefits shall extend beyond the academic domain, improving your interactions with the world about you.

SPARK 001 - Memory, Narrative & (Hi)story

Taught by: Paula DeBoard, Global Arts, Media and Writing Studies

In the past, it was said that history was written by the winners—those who, through positions of power and privilege, shaped a narrative that was widely understood to be the truth. Today, with access to a multiplicity of perspectives and voices, we know that historical truth is much more complex. Through primary and secondary research, we'll look at the story part of history and examine how personal experience (our own and others) shapes our understanding of the world.

SPARK 001 - Morality, Self and Community

Taught by: Peter Vanderschraaf, Cognitive and Information Sciences

In this seminar we will explore the relationships between morality, self- interest and community interests. Philosophers have discussed how following moral requirements might be connected with serving one's own interests or the interests of one's communities since at least Plato's time. How self-interest or community interests might be related to morality is not at all obvious, since while many claim that morality and self or community interests must go hand in hand, in many situations it appears they are in direct conflict, so that in order to "do right" one

must act against one's own good or the good of the community. To help motivate our own discussion, we will look at works that analyze how morality and self and community interests are connected from both philosophy and the social sciences. We will consider some of the classic skeptical challenges against the prudential rationality of justice by Plato, Thomas Hobbes and David Hume, as well as some of the leading recent discussions of moral norms and individual and community interests by philosophers and social scientists such as Cristina Bicchieri, Elinor Ostrom and Robert Sugden.

SPARK 001 - The Music Festival

Taught by: Mariana Abuan, Merritt Writing Program

Full Title: The Music Festival Scene: Poison, Cure, or Symbol for Society's Ails? In this course, we will use the music festival scene (EDM and others) as a subject of academic inquiry. We will learn how to generate research questions related to the music festival, understand and interpret written and visual texts, select and incorporate appropriate information into our own research, prepare and write successful academic papers, and present information orally. By examining a variety of texts (scholarly, popular, and visual) about the music scene and related elements, we will investigate what social, economic, political, and environmental impacts a weekend-long event can have, and what this might tell us about our culture as a whole.

SPARK 001 - Mythologies

Taught by: Grant Nebel, Applied Mathematics

Every society has its own culture, and a conversation about that culture, from the theater of the ancient Greeks to the Bible of medieval Europe to the movies of 20th-century America to the videogames of here and now. "Mythologies" will cover this range of cultural artifacts, and how each one creates a set of values and conversation about them. The Socratic demand "know thyself" can be most easily experienced through knowing what one likes and dislikes, so this seminar will lead students to articulate their thoughts and feelings about their own culture, and to lead the conversation about its values.

SPARK 001 - National Parks and Landscapes

Taught by: Jeffrey Jenkins, Management of Complex Systems

Landscapes are a useful lens for inquiry into the history of nature and culture in the national parks. In this course we will explore how national park landscapes have

been represented and communicated in popular culture through writing and visual media. Students will learn to think critically about how historical heritage, societal values, political interests, market forces, and environmental change have shaped interpretive, recreational, conservation and management outcomes to produce the physical and cultural landscapes of national parks.

SPARK 001 - New Modes for Old Truths

Taught by: Grant Nebel, Applied Mathematics

Every society has its own culture, and a conversation about that culture, from the theater of the ancient Greeks to the Bible of medieval Europe to the movies of 20th-century America to the videogames of here and now. "New Modes for Old Truths" will cover this range of cultural artifacts, and how each one creates a set of values and conversation about them. The Socratic demand "know thyself" can be most easily experienced through knowing what one likes and dislikes, so this seminar will lead students to articulate their thoughts and feelings about their own culture, and to lead the conversation about its values.

SPARK 001 - Our Energy Future

Taught by: James Bernard, Division of Undergraduate Education

The primary objectives are to learn how to formulate questions about energy production and consumption scenarios, how to use simple physics and existing data sources to develop models to answer those questions, how to think and write clearly and logically about energy (or anything else), and how to work cooperatively to achieve important goals. To achieve these, you will read about energy production and consumption and design questions regarding future energy scenarios; work in small teams to develop simple quantitative models to answer those questions and write short reports on the basis, logic, and results of each model; form teams that represent competing interests and debate future energy scenarios; collaborate with the entire class to write a document that uses the results of the models and the debate to assess various scenarios and recommend a plan of action.

SPARK 001 - On Meritocracy

Taught by: Toby Napoletano, Division of Undergraduate Education

It is often assumed that our society is broadly meritocratic--the smartest, most talented, and most hardworking are the ones who are the most successful. It is often assumed, further, that this meritocratic arrangement is a good thing. But are these assumptions true? How well do our economic and educational systems select

for merit? What is merit in the first place, and would a true meritocracy even be a good thing? This seminar aims to critically examine these questions, confronting philosophical questions concerning the nature and value of merit, in additional to empirical questions concerning our economic and educational institutions. We will look critically as a group at the meritocratic policies that have directly affected our own lives, and to the extent that luck or structural systems interact with these meritocratic principles. This may involve looking at policy documents for places of work, schools, or other extra-curricular activities we have had involvement in, as well as procedures for determining local positions of political power.

SPARK 001 - Our Implicit Experience

Taught by: Jason Emory, Psychological Sciences

Humans often live with the assumption that our experiences, attitudes, and behaviors are the result of very explicit conscious thought processes. There is now a vast literature across a variety of fields that suggests much of our understanding of the world is the result of implicit unconscious processes that are outside of our explicit control or awareness. In-class discussions will center around exploring ways in which unconscious thought processes can help foster a deeper appreciation of topics such as art and politics (among others). Weekly readings, as well as multimedia and other in-class demonstrations, will serve to reinforce topics of discussion. Students will complete a research paper over the course of the semester in which they will perform independent research on a topic of interest that can be viewed through the lense of research in implicit thought processes. The course will conclude with an oral presentation to the class detailing the contents of their research paper.

SPARK 001 - Philosophical Literature

Taught by: Michael Koontz, Merritt Writing Program

Ever since Plato banished the poets from his utopian Republic, literature has occupied a precarious position in the study of the good life, of knowledge and truth, of the self and subjectivity, and of politics and society. Yet, despite this precariousness, literature has also often been recruited as a tool, instrument, and medium by which to entertain and treat questions stemming from the discipline of philosophy. In fact, many writers of the nineteenth- and twentieth-centuries (including philosophers) wrote literary fiction that consciously entertained philosophical questions and problems. It would seem, then, upon closer inspection, that these two disciplines may have much more in common than often assumed. In this course, you will learn how to develop scholarly "problems," generate research

questions, to strengthen critical reading skills, and to practice the conventions of academic writing. To accomplish these tasks, you will read short stories and novels that tend to philosophical concerns relating to being (ontology), to knowledge (epistemology), and to art (aesthetics). Readings may include Dostoyevsky's Crime and Punishment, Nietzsche's Thus Spoke Zarathustra, Kafka's The Trial, Herman Hesse's Siddhartha, Camus's The Plague, Beauvoir's The Mandarins, and Coetzee's The Age of Iron (among other possibilities).

SPARK 001 - Planet or Plastic?

Taught by: De Ette Silbaugh, Merritt Writing Program

National Geographic published an expose in June, 2018, titled "Planet or Plastic?" and since has created podcasts that dive deeper into this argument. We will use these texts as a starting point to look into the plastic explosion that is overtaking our world. We will verify the facts, explore the social consequences, question the economics, research various approaches to resolution, and consider solutions both past and present. All to bring us to the question: Planet or Plastic? Do we have to choose? Note: Natl Geog after publishing this article pledged to wrap their magazine in recycled paper instead of plastic. This eliminated 30 million plastic bags a year. Easy, yes, question, why did it take so long?

SPARK 001 - Politics of Political Reform

Taught by: Nathan Monroe, Political Science

Political reform is an important and many times necessary approach to solving inefficiencies of government. However, the consequences of such reforms are not always straight forward. Reforms sometimes fail to meet their objectives and often manifest unintended consequences that can be worse than the original problem the reform was intended to solve. This class is designed to help students engage in understanding political reform from a systematic, analytical evaluation of political reforms.

SPARK 001 - Popular Dietary Messages

Taught by: Cleo Protogerou, Psychological Sciences

"Fat clogs arteries." "Go low fat or no fat." "Red meat is unhealthy." "5-a-day." "The Mediterranean diet is a miracle diet." "Bulk on fiber." "Everything in moderation." "Breakfast is the most important meal of the day." "Eat many, small meals throughout the day to keep metabolism high." "Calories in – calories out."

SPARK 001 - Prison Literacy

Taught by: Catherine Koehler, Merritt Writing Program

Reading and writing have played a central role in how incarceration is conceptualized, legitimated, and experienced. In this course, we will examine how literacy has figured in historical and contemporary debates about the nature of crime and the purpose of punishment, while considering prisoners' diverse literacy practices over time and across carceral spaces. With a focus on institutional genres ranging from prison memoirs to prison ledger art to prison newspapers, we will explore how prisoners have appealed to literacy and toward what ends. Using primary source materials housed in the UC Merced Library Special Collections and other regional archives, we will explore literacy within local "assembly centers" where Japanese and Japanese Americans were incarcerated in Merced and the greater Central Valley during World War II. We will also consider local prison education programs, with opportunity to engage in prison literacy work.

SPARK 001 - Psychologists Behaving Badly

Taught by: Eric Walle, Psychological Sciences

Research ethics and standards exist for a reason. Understanding that rationale involves learning from past research studies that pushed or exceeded current standards. This course will first review fundamental aspects of experimental design and research ethics. Next, it will highlight specific studies that have approached or crossed these standards, including studies of conformity, in-group vs out-group, early development, false memories, and biological and psychopharmacological research. The research covered will include seminal studies in the field, many of which would not be ethically approved in today's research climate. Finally, the course will touch on controversies that presently exist, such as vaccines, implicit attitudes, and the replication crisis.

SPARK 001 - The Power of Teams and Groups

Taught by: Emily Langdon, Student Affairs

Leadership trainers and management textbooks often quote Margaret Mead when promoting group work and collaboration: Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has. However, anyone who has tried to get something done in a group knows there are plenty of doubts about the efficiency and effectiveness of teamwork and groups projects.

The ability to work effectively in groups is a critical skill in the 21st century workforce. "At best, IQ contributes about 20 percent to the factors that determine

life success, which leaves 80 percent to other forces" (Goleman, 1995, p.34). These other forces are sometimes referred to as "soft skills" and include ways to manage people, relationships, teams and groups to positively impact the organization. This seminar will take a multidisciplinary look at teams and group work, including scholarship from psychology, sociology, anthropology, political science and management to better understand how tasks can be accomplished and change can be created by people working together. Students will learn basic tenets of qualitative research (participant observation) to ask and answer a research question about the nature of groups. In addition to studying other groups, students will self-assess their teamwork skills and strive to increase their own capacity for teamwork, a highly regarded skill in the world of work.

SPARK 001 - The Promise of America

Taught by: Rebeca Antonie, Merritt Writing Program

In this class, you will examine a variety of texts (fiction, nonfiction, film) that present narratives of the "American Dream" representing native and immigrant experiences. We will discuss how race, class, gender, and ethnicity intersect, inform, and complicate the notion of social mobility that rests at the heart of the "American Dream." This course will strengthen your critical skills through analyzing text as well as your creativity as you construct your own "American Dream" narrative.

SPARK 001 - The Psychology of College Life

Taught by: Ross Avilla, Psychological Sciences

This course will explore many different aspects of college life for students at UC Merced, using the lens and practices of social psychology. In this course, you will examine psychological aspects of what it means to be a student and what determines students' academic success, mental health, or other aspects of student life. This is something you (as a student) obviously have first-hand experience in, but you may find that by conducting research on this topic, you will discover things you never knew about yourself and other students here at UC Merced! As part of this course, you will engage in collaborative research on a topic related to college life. This will involve the development of basic research skills, critical thinking skills, and oral and written presentation skills. These skills are applicable to almost any course at UC Merced and will help to prepare you for future work at this research and community- focused university. We will also explore social psychological topics that are related with everyday life at UC Merced, which can be applied to make a student's college experience more successful, positive, and personally meaningful.

SPARK 001 - The Public Constitution

Taught by: Thomas Hansford, Political Science

This Spark Seminar will investigate how the American public understands the U.S. Constitution, both in terms of direct content and as how it has been interpreted and applied by the U.S. Supreme Court.

SPARK 001 - Pursuit of Happiness

Taught by: Eileen Camfield, Global Arts, Media and Writing Studies

While stated as a fundamental objective in the U.S. Declaration of Independence, happiness remains elusive for many people. This course will examine the interplay between private and public happiness by looking briefly at the history and definitions of our modern concept of happiness, examining recent work in fields ranging from psychology to economics, observing current social trends, and engaging with film and literature. Simultaneous to this reading, students will document various aspects of their own happiness. Through this study, we will explore ways to maximize happiness – through self-knowledge, positive emotions, community, meaningful work, wellness, play, and public life. Students will reflect on and extrapolate from this material to design a specific "happiness plan" for their own lives.

SPARK 001 - Race & Ethnicity in Film/TV

Taught by: Marisol R Alonso, Merritt Writing Program

Film and television play a central role in how we understand race, racial categories, and ethnic cultural identities. This Spark seminar explores the historical, social, and political forces that shape the representations of race and ethnicity in film and television through an interdisciplinary analytical lens that will encourage students to critically examine and question the meaning of race and ethnicity. We will explore race and ethnicity by asking questions like, how have race relations and racial/ethnic minorities been represented on popular screen? How have filmmakers, screen writers, and media-practitioners of color responded to these images by developing different kinds of aesthetic choice and modes of storytelling? The goal is for students to become more literate about the power of film and television to reflect and shape ideologies of race and ethnicity, and to analyze how these identities impact the diverse experiences of individuals and groups in our society. In a broader context, we will analyze how the meaning of race and ethnicity, and their intersectionality, has shifted and changed across time and

space, and how film and television has contributed to these shifts, particularly for African American, Asian American, Latino, and Indigenous populations.

SPARK 001 - Race and Ethnicity in the US

Taught by: Maria Martin, History and Critical Race & Ethnic Studies

Race and Ethnicity in the US will be an interactive journey into an analysis of issues of race and ethnicity in the US, using hip hop teaching methods, to create cultural awareness. Students will discuss issues of race in the US alongside topics such as hip-hop feminism, Black Wall Street, mass incarceration, economic inequality, policing, social critique within hip hop culture, and the art of remix. This course focuses on building skills in writing, analysis, critical thinking, research design, and oral presentation through completing five core writing projects. Students will navigate this immersive experience using a variety of platforms such as twitter, YouTube, video/audio recordings, class discussions, and oral presentations.

SPARK 001 - Really, This is Mathematics!

Taught by: Yue Lei, School of Natural Sciences

All mathematics come from real life and are applicable to real life. This course will help students develop problem-posing and problem-solving skills as well as the ability to clearly communicate their ideas and reasoning through studying of everyday life situations and/or games. The format of the course is based on the Math Circles project. Students will be presented with interesting yet perplexing everyday situations that lead to a variety of topics for mathematical inquiry. They will start by asking questions and deciding on which aspects of the problem to study. Then, working in groups and/or individually, they will apply various problem-solving strategies to tackle the problem. They will share different ideas and present solutions to each other in class, and document they findings in writing.

SPARK 001 - Renewable Energy Facts and Appl.

Taught by: Abbas Ghassemi, Environmental Engineering

This course is multi-disciplinary. No Pre-Requisites or Co-Requisites are required. This course introduces the key concepts of renewable energy technologies focusing on wind, solar, bio-based fuels and geothermal resources. The focus will be on technology, the system and its design, as well as conversion and storage devices for renewable energy sources. This course will assess both current and potential future energy systems. It will cover the quality, availability, use, innovation, extraction and conversion of resources, emphasizing meeting regional and global energy needs for

the 21st century in a sustainable manner. The overall educational objective is to demonstrate multi-disciplinary, strategic thinking in a sustainable developmental context considering diverse constraints. Students will learn how to conduct research, interact with one another as a team, ask questions, and identify/communicate strategies. Additionally, they will develop a team based quantitative framework to aid in the evaluation and analysis of energy technology systems in the contexts of engineering, political, social, economic, and environmental goals.

SPARK 001 - Resurrecting Lost Narratives

Taught by: Christa Fraser, Global Arts, Media and Writing Studies

In this course, we will look at differences between historical texts about significant events and first-person singular and plural narratives about the same events in order to investigate the ways in which individual and cultural narratives become appropriated, subsumed, or erased in favor of the dominant historical record. The course will have a particular focus on California narratives, offering students the opportunity to investigate the displacement of people during the Dust Bowl, the Bracero program, the Chicano Movement, the Civil Rights Movement, the American Indian Movement, the United Farm Workers' Movement, and the settlements and resettlements of refugee, immigrant, and migrant populations. (Students can select historical events that occur in other states or countries for their project, however, with the permission of the instructor.) The course will look at the California Gold Rush as a case study of the fossilization of an account that is missing many narrative voices and at the Manzanar National Historic Site's Museum Collection as a case study of efforts to justly collect, store, and share all relevant first-person narratives and historical artifacts.

SPARK 001 - Robots, Androids, and Cyborgs

Taught by: Mariana Abuan, Merritt Writing Program

Robots, androids, cyborgs, and A.I. are an increasing part of life in the 21st century and the technology behind them is evolving rapidly. It is an exciting and essential time to not only understand how it affects our lives today but also what could be in our future. In this course we will engage in discussions about past, fictional, and emerging robotic and related technologies along with the ethical, economic, political, and social considerations they come with. We will ask questions like, will robots eventually replace us all? Should someone with prosthetic legs be allowed to compete in the Olympics? Could the development of androids result in a repeat of slavery?

<u>SPARK 001 - Science Fiction and Fantasy</u>

Taught by: Adam Bryx, Division of Undergraduate Education

This course will examine speculative fiction as it emerges in plays, short stories, novels, TV, film, and a diverse set of cultural phenomena, including cosplay, conventions, tabletop gaming, videogames, E-sports, alien conspiracy theories, and much more. Some of the key concepts that the course will explore is the awe-inspiring and sublime, science fiction and fantasy in both extrapolative and thought experiment modalities, the aesthetics and imagination of world building, rhetorical strategies of storytelling.

SPARK 001 - Science of Science

Taught by: Alexander Petersen, Management of Complex Systems

Why do science? This seminar introduces the modern research university through a systems analysis of the inputs (e.g. money, labor, knowledge, infrastructure) and the outputs (human, social, technological and intellectual capital). Thematic concepts explored are the scientific method, university-industry-government relations, careers, publications/patents, mobility, teamwork, prizes and priority. Special focus and examples will be drawn from the University of California system, including statistical analysis of its funding and publication records from 2000-2015. Students will integrate course content into a final team project consisting of a "dream lab" funding proposal.

SPARK 001 - Seeing is Disbelieving

Taught by: ShiPu Wang, Global Arts, Media and Writing Studies

How do we navigate through a global culture dominated by imagery and the Instagram-age myth of "I am seen, so I exist"? What is the long history of the notion of "seeing is believing" and how has it been challenged by the emergence of new technologies, such as visual manipulation software and "deepfake" videos? In this seminar, we explore historical and contemporary examples of visual representation from around the world through reading, discussion, writing and creative assignments. Our topics include, among others: the science of visual perception; tricks and tropes of visual storytelling in different cultures; visual propaganda in times of sociopolitical change and turmoil; the history of gendered imagery; anime and kawaii in the shadows of atomic annihilation; contested verisimilitude in photography and digital technology; and the proliferation of global American consumerism via the power of visual media. The main objective of this seminar is to help students develop their visual literacy, analytical skills, and creativity. Students

will thus apply their knowledge and create multimedia projects, which will be showcased on campus, that present critical commentary on our contemporary visual culture based on this seminar's topics.

SPARK 001 - Selfies of the Divine

Taught by: Tommy Tran, History Critical Race and Ethnic Studies

Spirituality continues to remain a key part for human self-expression. Our current day and age of digital technology and consumer culture have not diminished but rather enabled new ways for people of different faiths to reinterpret spiritual meaning. This course draws from the Hindu concept of darsan and the Sufi concept of baraka – both terms referring to one's experience with a spiritual presence – in understanding how people use the arts to express the human desire for meaningful connection with the universe. Students will engage on a virtual world tour of multiple spiritual forms and philosophies in everyday life from the elaborate altar goods of Latin-American botánica shops right here in the western United States, to mystical graffiti representing local saints in urban Senegal, and to contemporary shamanism in hyper-digitized South Korea. This course will also introduce a variety of concepts in folklore and religious studies, philosophies of aesthetics, and is thus intended to introduce students to interdisciplinary methods including in ethnographic and historical research of material culture, museum studies, and religion. A key project in this course is to collect, document, and analyze the spiritual practices and folklore of friends, neighbors, family, and community members.

SPARK 001 - Shakespeare's London

Taught by: Susan Amussen, History, Critical Race and Ethnic Studies

What is the relationship between literature and the society in which it is written? In this class, we will explore this question with a focus on London between about 1590-1620. We will examine plays by Shakespeare and some of his contemporaries in relation to social and cultural issues in England at the time. How did Shakespeare's contemporaries see the world? What assumptions did they make – about class, gender, race, or family, love, and marriage? What did they think about work? Who lived in London? What kind of entertainment was available? Who attended plays? What political issues animated discussion? What literary, dramatic, and intellectual traditions were available at the time? These questions, and others you generate, will guide our discussions through the semester.

SPARK 001 - Should I Donate a Kidney?

Taught by: Kurt Schnier, Finance & Administration

Currently, the available supply of organs for transplantation is far outpaced by the demand for these organs. In this course, we will discuss the current psychological, ethical and political barriers that exist to reduce this rift and develop research questions regarding the efficacy of future solutions. The course will cover the history of organ transplantation, the biological factors influencing organ donation and transplantation, the ethics surrounding potential solutions, the prior efforts made to address these growing needs, the current policies in place to promote organ donation across the globe and the potential future needs for organ donation in the context of global change and demographic transition. Students will be challenged to answer a number of key questions including: What changes to our current system will increase donation? What solutions are ethical and which ones are not? Why do some cultures differ in their views regarding transplantation? In this course students will be required to conduct independent research through the collection of data and subsequent analysis, write short papers on key questions in organ donation from multiple perspectives, communicate their findings in both written and oral form, participate in group projects and summarize their work in a final paper. The course will encourage students to critically evaluate the current organ donation system and encourage them to creatively develop solutions that will help us meet society's future health care needs. At the end of the course everyone should be able to answer the question, should I donate a kidney?

SPARK 001 - Skateboarding (Sub)Culture(s)

Taught by: Matthew Snyder, Merritt Writing Program

Skateboarding has grown into a global cultural phenomenon in the decades since 1950s-era California surfers removed the handlebars from fruit-crate scooters to simulate the action of riding waves on concrete and asphalt. This course examines and interrogates the now-global phenomenon of modern skateboarding through multiple modes of academic disciplinary focus. At once a mode of transportation, a sport, an artform, a lifestyle, a creed, and both a socially acceptable and unacceptable (or even illegal) activity depending on where it takes place, skateboarding nevertheless cannot comfortably be described as any of these things in isolation; it defies easy categorization and explanation. Skateboarding sits at the nexus of several fields of intellectual inquiry -- among them applied mathematics, architecture, art, business, cultural studies, economics, gender studies, materials science, mechanical engineering, medicine, physics, psychology, public administration, public health, sociology, sports science, and urban planning -- and therefore provides a rich field for students in STEAM orientations (science,

technology, engineering, arts, and mathematics) to study. Students will practice university-level academic research keyed to their own specific disciplinary interests while examining the same general topic from multiple, varied perspectives and angles of focus.

SPARK 001 - Social Justice & Child Lit

Taught by: Michelle Toconis, Merritt Writing Program

Ever heard of La Llorona, The Giver, chupacabra, Tofu Quilt, The Trouble with Rainbow Boys? What do these tales and texts say or exclude about the culture that produced them? In this course, students in this course will learn how to select, read, evaluate and analyze depictions and aspects of social justice and injustice in children's and young adult literature. Through various genres of literature intended for both the child and adolescent reader, students will develop an informed awareness of the complex perspectives, uses and boundaries of literature and will learn to recognize and analyze how adolescent and children's literature depict stories related to social justice, tolerance, equality and social change. In this course, students will learn how: to develop an understanding of the history of social justicerelated children's literature: survey a range of authors, works, genres and media depicting social justice issues for youth; examine how adolescent and children's literature depict stories related to social justice, tolerance, equality, and social change; draw parallels between early and modern adolescent and children's literature to generate real-world research questions, identify current problems, and formulate tentative solutions; students will practice the use of multiple interdisciplinary analytical tools to identify, interpret, and evaluate literary and societal trends and social justice issues represented in materials for youth; students will gain experience in discussing, evaluating and promoting children's literature/resources that depict social justice issues by working independently and collaboratively applying their research and analysis using written, visual, and oral modes of communication to convey ideas; and students will learn to identify the ways in which cultural, political, economic, technological, and environmental dimensions of society interact understanding that conflict is inherent and welcome in diverse learning communities.

SPARK 001 - Social Media and Society

Taught by: John Bultena, Merritt Writing Program

In this course, you will learn how to generate research questions related to social media, practice strategies for understanding texts and how social media networks present information, use composition as a tool for exploring and learning, improve

your ability to write successful academic papers on any subject, and improve oral delivery skills. To accomplish these goals, you will examine and critique social media networks and articles about them, keep up with contemporary and news regarding social media, be aware of the ethics concerns of social media, and hear from professionals in social media. In addition, a consistent and constant concern throughout the class will be the role that social media plays in all our lives and the world.

SPARK 001 - Social Movement of the 60's

Taught by: Pamelyn Gingold, Merritt Writing Program

This course will explore the array of social movements that flourished during the 1960s and early 1970s, ranging from Civil Rights and Black Power to the struggles of farmworkers and American Indians; from the anti-Vietnam War movement to the environmental movement; from Women's Liberation to the early gay rights movement and many others. These movements brought about transformative change in many areas of American society and set the stage for so many of the issues confronting us today. Music played a crucial role throughout the 1960s, and the course will feature a specially curated selection of songs and videos to bring the era to life.

SPARK 001 - Sports Analytics

Taught by: Derek Sollberger, Applied Mathematics

This semester seminar will introduce budding analysts to the field of growing field of sports analytics. Instruction will start with baseball sabermetrics, but will evolve to allow students to research, discuss, and become an expert of their favorite professional sport. Activities include participation in fantasy sports, corporate presentations, debates, and computer programming calculations.

SPARK 001 - Theatre and Community

Taught by: Katherine Brokaw, English

In this seminar, you will consider the ways in which theatrical performance can make a difference to various communities, and you will generate research questions related to this topic. These research questions might lead you to study performances across the world, or right here in Merced. You will read, view, and interpret various literary dramatic texts (plays), and will also read and discuss accounts of various ways in which performance has been applied around the world to address issues of inequality, power, and social justice. You will use writing as a

tool for learning, expand your abilities to write research and write successful academic papers, and improve your oral delivery skills.

SPARK 001 - Tracing Heritage: Spain/USA

Taught by: Virginia Adan-Lifante, Literatures, Languages, and Cultures

Why are California and Merced named like that? What is the origin of the \$ symbol? Who is the man on a horse in the statue located in the Plaza de Panama in Balboa Park (San Diego)? How is Spanish technology helping Texas to become a leader in eolic energy? Why does Salvador Dalí have a permanent exhibit of his work at the Museum of Monterey (CA)? In Tracing Heritage: Spain/USA, we will look for information that will allow us to answer these questions and many others, so we are able to understand the contributions of Spain to the past and present of the United States. At the same time, we will reflect on issues such as being receptive or not to different cultural influences or why in some instances we may feel rejection toward our heritage and past.

SPARK 001 - Trauma and Resilience

Taught by: Elizabeth Cunningham, Global Arts, Media and Writing Studies

This course will trace the evolution of trauma theory through literary representations of individual and collective trauma. In this course, you will learn how to identify and complicate historical models of trauma theory, apply these models in response to literary texts, and strengthen collaborative learning and presentation skills. To those ends, you will read and analyze fiction, nonfiction, poetry, and theory, draft and revise original essays, and collect and reflect on evidence relating to contemporary sociocultural issues. We will examine a multiplicity of contexts, likely involving World Wars I and II (including Holocaust literature), Caribbean literature, African-American history, 9/11, and others. Rather than focusing singularly on trauma, we will also discuss conceptions of resilience as they relate to literary production and coping.

SPARK 001 - Turning Down the Heat

Taught by: Tom Harmon, Environmental Engineering

Global warming and the associated climate change is a major challenge to humans, and it is now time to face this challenge. The past two centuries have seen staggering advancements in our civilization through innovation and industrialization. However, the byproducts of our resulting fossil fuel based economy, like carbon dioxide, continues to increase the greenhouse effect

and warm our planet. Our warmer atmosphere is already producing more intense conditions, as evidenced by increasingly severe of droughts, floods, wild fires, hurricanes and other natural disasters. In this seminar, we will critically examine numerous strategies to reverse global warming. We will explore the problems from socio-environmental perspective, addressing issues of energy, food, land use, sustainable buildings and cities, transportation, and green materials. Students will learn to: (1) question and research proposed strategies at local, regional and global scales, (2) communicate their own strategies, and (3) integrate the knowledge they gain into future curriculum choices as well as their daily lives.

<u>SPARK 001 - Understanding Investments</u>

Taught by: Jason Lee, Economics and Business Management

This course is designed to provide students with an introduction to the various types of financial assets that are traded, including bonds, stocks and derivatives (options and futures markets). Students will be introduced to the different investment choices available, how the stock market works, how to evaluate stocks, and how to build and manage a well balanced portfolio. Through the management of a simulated investment portfolio, students will get hands on experience in investing and trading using both fundamental and technical analysis.

SPARK 001 - Utopia: The (Im)possible Dream

Taught by: Paula DeBoard, Merritt Writing Program

Utopia, from Latin, is an imagined place of ideal perfection. Literally, it's also "no place" or "nowhere." Since the publication of Sir Thomas More's Utopia in 1516, the idea of a perfect world—one that rights the wrongs of existing societies and governments—has populated fiction and film. What can we learn from these ideals of a perfect world, and the dystopian visions of those ideals gone wrong? And how can we use these ideas to begin to address the needs of our own communities?

SPARK 001 - Vaccines, Health and Society

Taught by: Marcos Garcia-Ojeda, Molecular & Cell Biology

This Seminar will examine current and past issues concerning vaccines, including: a) the history of vaccines, focusing on different strategies used during the past two centuries to make them; b) the science of vaccines, including methods of attenuation of various pathogens; c) the impact of vaccines on health, both in the United States and abroad; d) the risks, both real and perceived, of vaccines; and e) the controversies surrounding vaccines, specifically that vaccines cause autism,

multiple sclerosis, neurodevelopmental delays, diabetes or other chronic problems. This seminar study will cover the biological development, immunologic concepts, and methods for vaccines as well as methods of delivery and administration. Specific topics may include new technologies for vaccine development, novel adjuvants, and methods to increase vaccine stability. Delivery systems for vaccines will include current technologies as well as novel technologies presently under development. The underlying biological roles of the innate and adaptive immune systems will be studied relative to the new types of vaccines and delivery systems. Finally, the process of manufacturing and bringing vaccines to market will be covered including government oversight and licensure.

SPARK 001 - Villains An unnecessary evil?

Taught by: Mariana Abuan, Merritt Writing Program

Would we have Batman without The Joker or Captain America if Hitler never rose to power? There is no older story than the battle between good and evil, and this enduring human conflict is a rich area for not only reflection, but research. In this course, we will confront the inescapable irony about villains: They are what push the narrative forward in fiction--not the heroes. By examining villains from fiction, history, and today we explore whether or not there is a hidden benefit to their existence in fiction and reality. Some questions that will guide this seminar are: 1. What defines a villain? 2. Are villains born or created? 3. Do villains contribute positively to our morals? 4. Can villains be considered the driving force behind radical change? 5. Do we still need villains?

SPARK 001 - The Value of Music

Taught by: Jayson Beaster-Jones, Global Arts Studies Program

This course explores the cognitive, social, and psychological values of music for people all over the world. We will engage with musical performance and reception in a variety of local, national, and international contexts. These will include religious and social rituals, multimedia products (such as films, podcasts, and video games), and in social-biological reproduction. Students in this course will come to recognize how music is much more than entertainment: it is a fundamental component of the human experience.

SPARK 001 - Violence in Spanish Films

Taught by: Ignacio Lopez-Calvo, Literatures, Languages, and Cultures

This course will focus on the representations of violence in film from and about Spain. We will consider the following types of violence: 1) war, including but not limited to the Spanish Civil War; 2) torture and other state-sanctioned violence; 3) children and violence; 4) gender violence; 5) terrorism; 6) violence as spectacle; and civilization as violence. Another primary objective of the course is to introduce students to major directors in the history of Spanish film.

SPARK 001 - Weird Math and Human Behavior

Taught by: Jack Vevea, Psychological Sciences

In this seminar, we examine numerical oddities that affect, and sometimes distort, humans' interactions with the world. Examples include strange behavior rooted in our misunderstanding of probability, distortions in our memory that actually improve the accuracy of memories, misleading graphical portrayal of data, and questions about causation. The semester concludes with a debate about the mathematics and ethics of racial profiling.

SPARK 001 - What Do Things Mean?

Taught by: Maria DePrano, Global Arts, Media and Writing Studies

In our world we are surrounded by things - clothing, technology, transportation, eating utensils. What do they mean? Why do they have the design they have and what does that tell us about ourselves? Many everyday objects we use today were used by people in past societies, but they looked incredibly different. Why? What did those things mean to people in past societies? And what does their drastically different design tell us about those past people and cultures? In this course we will examine everyday things to understand what they mean, how they function, and what they tell us about different societies and time periods. You will write two related research papers of medium length and will make an oral presentation at the end of the semester. To consider people's possessions, we will think about the design of objects, using art history tools, but we will also consider their function by looking at societal practices, trade, gender roles, religion, science and politics.

SPARK 001 - What is a Research University?

Taught by: Hrant Hratchian, Chemistry & Chemical Biology

What is a "Research University"? Former UC President Clark Kerr once wrote that the American research university is "... a series of individual entrepreneurs held together by a common grievance about parking." In a way that's true, but there must be more to it! This Spark seminar will explore the role research universities

have played in education, scholarship, and service. The course will specifically study UC Merced's unique and young history as the first new American research university of the 21st century and aim to understand what that moniker truly means. What are its promises? What are its responsibilities? Students will engage in a discourse exploring these questions as a research problem seeking to propose how UC Merced should develop so as to distinguish the 21st century research university from its 20th century ancestor. What should we expect of UC Merced in the next decade and what will it take to get there?

SPARK 001 - Who Counts (in) America?

Taught by: Daniel K. Thompson, Anthropology & Heritage Studies

Counting and quantifying populations is an important part of constructing political power and revealing (or hiding) patterns of socio-economic inequality. The way that census officials count populations has a significant impact on whose voices are heard and how issues of disparity are discussed. In this course students will critically explore the concepts of counting and categorizing populations by learning basic approaches to organizing, analyzing, and mapping large datasets such as census data using introductory computer coding (no prior experience needed). The course engages students in developing their own analyses of demographic data as a point of entry into critical discussions about segregation, inequality, "gerrymandering" voting districts, and more general issues of categorizing human diversity.

SPARK 001 - Who is V for Vendetta?

Taught by: Michelle Toconis, Merritt Writing Program

Uses of dystopias/utopias. What does dystopia mean? The word dystopia sits in opposition to utopia. Utopia is a place, state, or condition that is ideally perfect in respect of politics, laws, customs, and conditions. Dystopia is a futuristic, imagined universe in which oppressive societal control and the illusion of a perfect society are maintained through corporate, bureaucratic, technological, moral, or totalitarian control. In this course, students will learn how: to take the controversies raised in utopian/dystopian literature and film to generate real-word research questions, identify problems, and formulate tentative solutions; students will practice the use of multiple interdisciplinary analytical tools to identify, interpret, and evaluate textual and media information; students will work independently and collaboratively applying their research and analysis using written, visual, and oral modes of communication to convey ideas; and students will learn to identify the ways in which cultural, political, economic, technological, and environmental

dimensions of society interact understanding that conflict is inherent and welcome in diverse learning communities.

SPARK 001 - Who's Laughing

Taught by: Mariana Abuan Merritt Writing Program

In this course, we will explore humor as a topic of academic inquiry by asking questions like, when is a joke not funny? Who does this joke negatively impact? What beliefs, stereotypes, or practices does a joke perpetuate or aggravate? By examining jokes and comedic performances through critical lenses and contexts, we will learn how to generate research questions about the ethical, racial, cultural, and political implications of certain types of jokes and humor today. We will learn how to rhetorically analyze written and performed comedic pieces, understand and interpret written and visual texts, select and incorporate appropriate information into our own research, prepare and write successful academic papers, and present information orally. By delving into the origins, histories, and contexts of jokes we will not only develop a deeper appreciation for this form of entertainment but also try to determine what kind of humor should be preserved and what kind should be abandoned.

SPARK 001 - Why People Believe Weird Stuff

Taught by: Jennifer Howell, Psychological Sciences

This course is organized around the idea that the beliefs we hold -- about ourselves, about others, and about the world -- are often closer to quickly constructed and poorly tested hypotheses than to established fact. This is particularly true for a category of beliefs that we will call "weird." We will cover beliefs in things most people might call "weird" like extrasensory perception, UFOs, ghosts, magic, as well as beliefs that may feel a bit close to home: in fad diets, homeopathic medicine, religious cults, superstitions, and even extreme political views. Because our beliefs shape everything from the life decisions we make, to the way we interact with others, to the governmental policies that are implemented, we have an obligation to critically evaluate our own beliefs whenever possible. This can only be accomplished with the use of critical thinking skills. One goal of the course is therefore to learn critical thinking skills and apply these to our own and others' weird beliefs. A second goal is to use standard psychological science and its methodological tools to examine paranormal beliefs and thus to gain an understanding of the origins, functions, and survivability of such beliefs. Thus, in this course we will explore psychological processes that contribute to irrational beliefs, superstitions, and erroneous beliefs and behavior.

SPARK 001 - Witches and Witch Hunts

Taught by: Michelle Toconis, Merritt Writing Program

From the Malleus Maleficarum (Hammer of the Witches), Monty Python's Holy Grail, to a diverse range of folktales, the witch is still a significant, dominant cultural figure in literature, film, and television. This course aims to survey the impact of the witch hunts on literature, popular culture, and law making, as well as to examine how early to modern witch-hunts intersect with attitudes about gender, religion, and community. In turn, the social significance of witches will shift from preconceived ideas that tend to oversimply the basis for witch-hunts to a more concrete understanding of the impact that long standing misnomers can have on a group of people; hence, offering alternative ways to think about the historical, as well as present day, treatment and persecution of a given population. In this course, students will learn how: to view the witch as a dominant controversial cultural figure in literature, film, and television, from surveying the impact of the witch hunts on literature, popular culture, and law making; examine how early to modern witch-hunts intersect with attitudes about gender, religion, and community; draw parallels between early and modern witch hunts to generate real-world research questions, identify current problems, and formulate tentative solutions; students will practice the use of multiple interdisciplinary analytical tools to identify, interpret, and evaluate various texts and information; students will work independently and collaboratively applying their research and analysis using written, visual, and oral modes of communication to convey ideas; and students will learn to identify the ways in which cultural, political, economic, technological, and environmental dimensions of society interact understanding that conflict is inherent and welcome in diverse learning communities.

SPARK 001 - Writing the History of Readings

Taught by: Manuel M. Martin-Rodriguez, Literatures, Languages, and Cultures

In this course, you will learn how to generate research questions related to the topic of reading, practice with different methods of scholarly research, and master presentation delivery strategies (both verbal and written). You will also be exposed to collaborative research practices by working with other classmates on some assignments. To accomplish these goals, you will read and critique published scholarly sources, you will be exposed to several research projects directed by the professor, and you will conduct original research. You will then choose proper written and oral formats to present your results (spreadsheet, essays, powerpoint, roundtable).