

# Honors Seminar Descriptions

Spring 2022

HONR 292A

## **Section 1: Science as a Way of Knowing: Water Science- C. Olivo-Delgado**

*MWF 9:00 AM – 9:50 AM*

Water is a fascinating substance that intrigues scientists from all historical ages and disciplines. It is essential for sustaining life on earth and represents  $\frac{3}{4}$  of the human body. What are the intrinsic qualities that it has, and particular transformations it undergoes that make water a unique compound controlling many processes in engineering, chemistry, biology, ecology, nutrition, and even human behavior? This seminar will engage students in the exploration of science from an interdisciplinary standpoint. The discussions will focus on relevant topics that will make students question scientific knowledge, theoretical frameworks and ethical considerations while applying concepts to the study of water.

## **Section 2: Science as a Way of Knowing: Climate Change Ecology and Challenges from Plants to People – J. Reeves**

*TR 11:00 AM – 12:15 PM*

Climate change has already begun to have profound effects on the structure and function of many ecosystems around the world. These effects and corresponding future predictions are very strongly founded in objective science despite the highly political nature of climate change in our country. With the realities of climate change rapidly becoming more directly tangible to people both in the United States and globally, objectively understanding how climate change will continue to affect ecosystems, agriculture, natural resources, and ultimately human well-being is becoming increasingly critical. Using “Science as a Way of Knowing,” we will explore the scientific method as the most objective process we have as humans to understand the natural world and how the process of science has led us to know we know about our global climate systems, both present and distantly past. We will introduce what science has taught us about how and why climate change happens (both naturally and anthropogenically) and we will continue with case studies on the effects that climate changes such as increased CO<sub>2</sub> and temperature have had (and will have) on the functioning of Earth’s ecosystems at many levels from soils/land, to plants, to insects, to vertebrate wildlife, and ultimately humans. These case studies will be viewed through the lenses of various sciences including physics/chemistry, ecology, conservation, agriculture, and others. Woven throughout will be much discussion on human values and the sociological and political constraints that we face as we tackle the challenges surrounding human use of natural resources and the corresponding anthropogenic causes of climate change.

### **Section 3 Science as a Way of Knowing: Exploring and Explaining Animal Behavior – J. Reeves**

*TR 12:30 PM – 1:45 PM*

Why do animals exhibit certain behaviors and how did such behaviors evolve? Using “Science as a Way of Knowing,” we will explore the world of animal behavior and how biologists know what we know about why (and how) animals do what they do. The mechanisms through which animals perceive their environment and the cues they use to initiate and regulate their behaviors will be examined throughout the course. Animal behavior links the genetics and physiology of an animal to the dynamic environmental and ecological aspects of its life, so many levels of biology and how they simultaneously influence animal behavior will be explored. Behaviors will be examined not only across a wide variety of animals from invertebrates to large domesticated mammals, but also across a variety of behavior types from mate selection, to food selection, to social living, and many more. Contemporary scientific hypotheses and theories will be used to explain the reasons why we think animals do what they do, which is often (if not always) ultimately linked to increased chances of survival and reproduction. As fascinating and even puzzling as some animal behaviors seem, they can be studied and explained using the scientific method, a main tenet of this course. Along the way, myths and misperceptions about animal behavior will be discussed, including those among the scientific community and how views have changed over time. For instance, animals (including invertebrates) are capable of some remarkably complex behaviors, often exceeding what many early biologists imagined. Finally, practical applications of animal behavior science will be discussed.

[HONR 292B](#)

### **Section 1: Science Fiction and Social Criticism – J. Brown**

*MWF 11:00 AM – 11:50 AM*

In 1978, literary scholar Darko Suvin described science fiction as the literature of “cognitive estrangement.” It was, he argued, the tension between the known reality of the reader’s world (cognition) and the imagined alternative world of the text (estrangement) that gave Science Fiction a privileged role in encouraging the kind of critical thought about one’s own society and circumstances that could disrupt the blinding nature of ideology. This seminar will explore the rich tradition of the science fiction short story by authors such as Isaac Asimov, Ursula K. LeGuin, Samuel R. Delany, Joanna Russ, Ray Bradbury, Octavia Butler, and Frank Herbert alongside select critical essays. Finally, the course’s ultimate goal is to investigate the ways that our attempts to know the imagined future affect our ways of knowing our present world.

## **Section 2: Manifest America: Knowing the Roots of Modern America by Looking West – D. Sheflin**

*MWF 1:00 PM – 1:50 PM*

The course is formulated around the study of an American identity that emerged with the articulation of Manifest Destiny in the 1840s. The ideology of Manifest Destiny, though not entirely new to Americans in that period, came to work as a justification for American expansion into the North American West largely because it facilitated the sense of exceptionalism that excused the costs of such expansion. In exploring the impact that it had and its influence on American history, we will connect Manifest Destiny to some of the more dramatic and formative events in US history, including the overland migration, the era of the gold rush, the Mexican-American War, and even the Civil War. In looking at how these issues of freedom, democracy, and opportunity play out in the American West and in the nascent American empire, we will look at the construction of race and the racialization of non-white people in the Americas, the promotion of American masculinity at home and abroad, and the balancing of American ideals and self-interest. We can then make broad connections with both the context and the legacies of this period by considering how much these themes remain part of an identity supported by many Americans today.

## **Section 3: Memoir and Non-fiction Graphic Novels – A. Davies**

*TR 9:30 AM – 10:45 AM*

How do we know our own story? Which stories are ours to tell? How do we make sense of different views of the same events? To understand these questions and explore possible answers, we'll start the semester with 5 weeks considering the philosophy of knowing. The seminar will engage students in the exploration of different ways of knowing - and their purposes, values, and limitations - in the arts and humanities. The seminar considers what counts as knowledge, and by whom; the methods employed to gain or affirm knowledge; the values attributed to knowledge; and the ethical and aesthetic implications of what one gains and does with the acquisition of knowledge. Understanding how we come to know will help us consider how we come to tell our own stories and the stories of those around us. To understand how others have grappled with these issues, we'll delve into non-fiction graphic novels, both memoirs and histories. We'll consider how visuals and text function together to tell true stories and whose truth they represent. We'll also consider whose truth they leave out and the implications of those choices. During the semester students will not only critically analyze these texts, but they will also craft non-fiction works of their own that will combine language and visuals. Writing our own stories will bring new awareness to the limitations of our knowledge and the value of questioning our interpretations.

## **Section 4 & 5: Knowing Through Literature – J. Kitchens**

*Section 4: TR 12:30 PM – 1:45 PM*

*Section 5: TR 2:00 PM – 3:15 PM*

What can literature tell us about the world around us? Or about how we are to live in it? The literary arts have been part of the transmission of knowledge and culture from their inception. This class will examine literature that was purposefully meant to transmit culture, convey information, or otherwise provide knowledge or wisdom. Much of what we call "myth" was for others, much more literal as it often sought to explain natural events in the world as well as provide instruction on how to live a virtuous and meaningful life. This class will read various texts from around the world, including those from ancient mythology as well as the wisdom literature and mysticism of the near and far east, e.g., excerpts from Proverbs, the works of Rumi, The Tao Te Ching, and The Jataka Tales (Buddhist instructional stories). We will also read fables including tales from One Thousand and One Nights, The Brothers Grimm, and some Norwegian folktales. Students will also investigate the Morality Plays from the Medieval era (and will have the opportunity to write their own). Finally, the class will look at American "Sage" writers such as Henry David Thoreau and John Muir in addition to realism and Modernist authors who often thought that literature could provide greater "truths" than science, or other objective disciplines.

## **Section 5: See Section 4**

## **Section 6: Knowing in Arts & Humanities: Do Non-Human Animals Create Art? – S. Zwick-Tapley**

*MW 12:30 PM – 1:45 P M*

Do non-human animals engage in the arts and humanities? How do we know? How do we know what constitutes the arts and humanities among our own species? This class will look at the definitions, history and current research regarding language, creativity and expression. From the philosophies of Charles Darwin and Renee Descartes to the research by Jane Goodall and Sue Savage-Rumbaugh and others we will explore the human identity and the identity we attribute to other species. Be prepared for thinking both inside and outside of the box of what we know and what we imagine.

## **Section 7 & 8: Knowing in Arts and Humanities: Social Construction of Knowledge – J. Kitchens**

*Section 7: MW 1:30 PM – 2:45 PM*

*Section 8: MW 3:00 PM – 4:15 PM*

The theme for this course is the social construction of knowledge, and it engages with the ideas of how knowledge is produced, by whom and for what purposes. Other considerations include what counts as knowledge and how has it been produced and transmitted in the past (and present), e.g., public schooling? What other institutions are involved in the production of knowledge? And what is the relationship between knowledge and power? Course materials will range in disciplinary perspectives including philosophy, history, education, sociology, literature, and film. Students will also be guided in a self-reflective investigation into how knowledge has been produced in their personal lives, and specifically how such knowledge informs their worldview, i.e., how they interpret and act in the world.

## HONR 292C

### **Section 1: Knowing Across Cultures: Refugees in a Global Era – C. López Ramírez**

*TR 3:30 PM – 4:45 PM*

There are around 60 million people in the world who have been displaced by war, persecution, natural disaster or conflict. Migration has become a big issue, especially after multiple terrorist attacks in Europe and the US over the last few years. As a consequence of the current immigration narrative, right-wing movements and parties, xenophobia, a fear for diversity and a lack of tolerance are on the rise around the world. This course will inquire into the nature, causes and consequences of contemporary refugee waves in our globalized world. We will set aside the current narrative and have a more open dialogue. To that end, we will debate personal social identity construction and stereotypes, and analyze the positive side of immigration to create a more open, respectful and tolerant society. Particular attention will be paid to the recent EU crisis, integration and segregation processes, racism, and cultural diversity.

### **Section 2 & 3: Knowing Across Cultures: Wildlife Conservation Issues – N. Vieira**

*Section 2: MWF 11:00 AM – 11:50 AM*

*Section 3: MWF 1:00 PM – 1:50 PM*

The seminar will engage students in the exploration of ways of knowing across cultures by understanding different cultural perspectives and values, and analyzing how these perspectives and values influence what we know about self, others, and world issues. Specifically, we will look at how culture influences global conservation of fish and wildlife. Students will critically reflect on how power, privilege, cultural identities, historical frameworks, social systems, and cultural backgrounds interact with science to influence both conservation successes and intercultural conflicts over wildlife management. Students will also learn to recognize effects of different “ways of knowing” and cultural biases on the interpretation of facts, empirical data, observation, and experience, and how they shape understanding of the possibility for certainty and objective knowledge in conservation, and in life in general. We will explore these themes through readings, group discussion, movies and videos, guest speakers, walking field trips and outside time!

### **Section 4: Knowing Across Cultures: The 14th Amendment and Race in U.S. History – J. Kim**

*TR 2:00 PM – 3:15 PM*

Our U.S. society and history are unlike any other. We are a nation founded on the lofty ideals of freedom, equality, and rule of law. The ratification of the 14th Amendment to the Constitution affirmed these principles immediately after the divisive Civil War and established higher standards in regards to the meaning of equality and fairness regardless of one's group membership. The central idea that everyone is equal before the law, if taken seriously, holds the promise for us to work towards a more fair and equitable society. However, our history is simultaneously replete with examples that significantly deviate from such principles. As a nation, we have long struggled with this contradiction, and, the persistence of inequalities continues to pose challenges for us today. Race (relations, conflicts, identities) is one such area where the tension between the promises of these ideals and the lived

realities seems to be an enduring feature of an American experience. But, is race, as a concept and reality, so impermeable and complicated that we collectively feel powerless to find a path out of an historical impasse? A part of the solution that this course will propose lies in our commitment to understanding the historical origins of race, its mechanisms and legacy, and the ongoing impact in shaping institutions, social relations, and identities. This seminar-course seeks to uncover how the concept of race originated, surveys key historical moments when race took the center stage, and commissions us to struggle together to figure out ways to move forward as a society.

