

# Honors Seminar Descriptions

Spring 2020

## HONR 292A

### **Section 2: Science as a Way of Knowing: Ocean Dynamics and Carbon Dioxide – U. Quillmann**

*TR 2:00 PM – 3:15 PM*

Why has climate change become the focal point of an increasingly polarized political conversation, whereas the vast majorities of other countries have long accepted climate change as a scientific fact and have accepted that human activities is the foremost cause of it? Climate science has become a pawn in the US political arena, with numerous politicians ignoring, rejecting, or misrepresenting scientific conclusions that conflict with their political views. People who lack authority on climate science are discussing the causes and solutions for climate change. The heated debate over climate science begs the question, what is science? In our seminar we will explore science as a way of knowing. Ocean dynamics and carbon dioxide (CO<sub>2</sub>) will provide the framework for our seminar. Ocean dynamics and CO<sub>2</sub> are the crucial players in climate change, regardless whether climate change is natural or caused by human activities. We live on an ocean planet with >70% of the Earth's surface covered by ocean and >97% of the Earth's surface water being stored in the ocean. The ocean plays an enormous role in absorbing CO<sub>2</sub> from the atmosphere, thus mitigating the effects of global warming by absorbing approximately one half of the CO<sub>2</sub> added to the atmosphere from fossil fuel burning. Scientists fear once the ocean has reached a tipping point when the ocean no longer can uptake any additional CO<sub>2</sub> from the atmosphere. We will examine the oceanic processes that make it possible for the ocean to take up excess atmospheric CO<sub>2</sub>. We will examine scientific tools that are being used to determine past CO<sub>2</sub> levels in the atmosphere and in the ocean. We will scrutinize climate models that are being used to predict future climate change. We will also look at the effects a warming ocean has on sea level, ice sheets and glaciers, sea ice, hurricanes, monsoons, and El Nino events. The role of CO<sub>2</sub> in warming had been long recognized before the earth's CO<sub>2</sub> problem was recognized. The earth's CO<sub>2</sub> problem is ocean acidification, often referred to as the evil twin of climate change.

### **Section 3: From Electromagnetic Waves to Gravity Waves: Theories, Experiments, and Inventions – W.**

**Toki**

*MW 3:00 PM – 4:15 PM*

We will examine the most important breakthroughs in the physical sciences in the last 150 years. This includes electromagnetic waves, Einstein's Relativity theory, Quantum Mechanics, anti-matter, and the Standard Model that predicted the Higgs boson (called the God particle after it was found). In case studies, we will explore, non-mathematically, the ideas behind the theory and predictions, the experimental evidence and the inventions made by entrepreneurs. In the most recent discoveries that are no longer science fiction (examples in subatomic particles, quantum computing, quantum teleportation, and even gravity waves), they do not yet have applications. In these cases, we will propose future inventions based on extrapolations and our imagination.

## HONR 292B

### **Section 1: Manifest America: Knowing the Roots of Modern America by Looking West – D. Sheflin**

*MWF 2:00 PM – 2:50 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 2: – J. Kitchens**

*Section 2: 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.

### **Section 3 & 5: Knowing Through Literature 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. – J. Kitchens**

*Section 3: TR 2:00 PM – 3:15 PM*

*Section 5: TR 12:30 PM – 1:45 PM*

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 Jātaka 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 4: Knowing in Arts and Humanities: Construction of Knowledge – M. Edwards**

*TR 11:00 AM – 12:15 PM*

The overarching theme for this seminar is the "construction of knowledge". Students will be engaged in discussions, readings, written communication, and oral communication to consider ideas of how knowledge is produced, by whom it is produced and for what purposes it is produced. The political construction of knowledge challenges students to consider the potential impacts of manipulating what is known and by whom it is known. Cultural identity, arts, philosophy, literature, film, and social media will be considered for their subjectivity and selectivity in the sharing of knowledge which can ultimately drive election outcomes, perpetuate social injustices, or be used as justification for wars. Students will also be challenged to reflect upon the sources of their own knowledge and to identify gaps that may ultimately impact their views and actions.

#### **Section 5: See Section 3**

#### **Section 6: Knowing Through Literature What can literature tell us about the world around us? Or about how we are to live in it? – S. Zwick-Tapley**

*MW 9:30 AM – 10:45 AM*

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 7: Science Fiction and Social Criticism – J. Brown**

*MWF 11:00 AM – 11:50 AM*

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 8: 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.

## **HONR 292C**

### **Section 1: Refugees in a Global Era – M. López Ramírez**

*TR 9:30 AM – 10:45 AM*

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: Environmental Perceptions across Cultures – A. Duffy**

*TR 11:00 AM – 12:15 PM*

Nature. Natural. Wilderness. Environment. We use these terms all the time, but what do they really mean to us? How does their meaning vary with time and place, and among individuals, cultures, and societies? This course investigates the role of culture, tradition, gender, and politics in human understandings of the natural environment. This investigation will take us around the world and will

include visions of the past as well as predictions about the future. Through this investigation, we will discover the ways in which human environmental understandings are constructed, communicated, manipulated, and transformed. We will ultimately gain a richer understanding of what our environment means to us and why.

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

*MWF 1:00 PM – 1:50 PM*

This 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 5: 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.