

# TREK

Rapid technological developments, economic expansion, globalization, human-created changes to our environment, social media. These are among the myriad factors that contribute to the complex challenges, both personal and global, that we face today. During their spring semester of **TREK**, students select from a range of **CHALLENGE** seminars, each offering in-depth, research-driven investigations into some of the most pressing concerns of the 21st century. TREK 116 Challenge seminars are led by innovative faculty who bring their own passion and expertise to explorations of emerging and enduring challenges.

### WATER: THE NEGLECTED RESOURCE

DAVID BIELER dbieler@centenary.edu

Water is essential for all life on Earth, but for much of Human history, we, its principal consumers, have treated it with callous disregard. In this class we will explore the natural water system and impact that humans have had on it paying particular attention to our resources in Louisiana and East Texas. We will examine the history of the rivers in our region, the role of groundwater in our resource evaluations, and how people have planned (or not) for its sustainable use. We will assess the current water resource situation in Louisiana and East Texas and examine and evaluate proposed remedies for potential problems.

#### **MAKING CHANGE**

CHRIS CIOCCHETTI cciocchetti@centenary.edu

We need change. We will learn to make it happen. The class will choose a problem to investigate, such as injustice in the Caddo Parish criminal justice system or the struggles uninsured people face finding healthcare. We will talk with community members and will learn about the history of struggles for justice in Shreveport. We will research our community's resources to figure out what we can do to make our community more just, sustainable, and compassionate. Students will learn to make change in a diverse community, and how we—individually and collectively—can put our beliefs and values into action.

# THE EVOLUTION OF EVERYTHING: LIFE, CONSCIOUSNESS, AND SOCIETY

LOREN DEMERATH Idemerath@centenary.edu

The human brain, climate, economics, music. Whether we are talking about individual organisms, social dynamics, cultural artifacts, or physical systems, we are constantly immersed in complex systems. This course introduces students to complexity studies, a burgeoning field that strives to explain everything, from the emergence and evolution of life, to consciousness, society, art, music, and even our sense of virtue. Students will learn and apply concepts from a variety of disciplines to explain emergent complexity—energy, entropy, thermodynamics, information, hierarchy, idiolects, tipping points, and connectivity, agency, autonomy, language, beauty, narrative, framing. Students will also become familiar with two new powerful tools for understanding complex systems—agent-based modeling and network analysis that are already used in fields like disease control, disaster management, and economic forecasting. Finally, students will use course concepts and analytic tools to present descriptions of themselves and the phenomena that interests them.

## MORMONISM AND AMERICA: BEYOND STEREOTYPES

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Revered and reviled, lauded and loathed, Mormonism is the fastest growing religious denomination in American history

and one of the least understood. Fear and distrust of religious groups such as Mormons results from a lack of information and understanding. This course will examine the Mormon church from historical, doctrinal, societal, cultural, and personal perspectives in order to explode stereotypes and to explore how the rest of American society can (or should) relate to this religious sub-culture.

#### OUR STORIES TOLD BY US: PUBLIC ART, INDIGENOUS EXPRESSION, AND CULTURAL DOCUMENTATION

MICHELLE GLAROS mglaros@centenary.edu

Who gets to tell our stories? Do we? Others? Does it make a difference? How do we know who we are? This course uses ethnography to explore the meanings of community, neighborhood, inclusion, and exclusion as well as the power of representation. We will begin with a case study: an examination of the history and functions of New Orleans' African American masking and processing traditions. This case study will focus on the roles and practices of Mardi Gras Indians. Skull and Bones Gangs, Social Aid and Pleasure Clubs, second line parades, and the active documentation and preservation of these traditions through local DIY museums and collections. Participants in this course will not only learn about how such cultural formations function to bind people to a community and to protect and sustain its inhabitants, but they will also learn about the design and practice of distinctive public art forms that differentiate New Orleans and Louisiana from the rest of the nation and world Using the Neighborhood Story Project as a model, students in

this course will learn how to produce their own ethnographic studies of Shreveport's indigenous neighborhood cultures and public art practices, thereby productively contributing to our local community's presentation and preservation of its own distinctive traditions

## ECOLOGY, TECHNOLOGY, CULTURE

JEANNE HAMMING jhamming@centenary.edu

America's relationship with the natural world is certainly a vexed one. From the profound fear and awe described by early pioneers to the nostalgia for a lost Eden in the nineteenth century to modern fantasies of domination and control. America is a nation shaped by our environmental imagination. All around us these days are nightmares of ecological collapse (Wall-E, The Day After Tomorrow, The Last Winter, Forty Signs of Rain, Mother!) We love our national parks and yet recoil from conversations about climate change. In this course students will dive into science fiction, film, and other pop-cultural representations of nature, seeking to answer such questions as: How has our attitude toward nature changed from the early days of colonial America to the present? How do representations of nature alter our politics (and vice-versa)? What is new about the rhetoric of collapse in contemporary culture? What roles do science, politics, and art play in shaping the American environmental imagination?

## DATING AND MATING: THE PSYCHOLOGY OF RELATIONSHIPS

#### AMY HAMMOND ahammond@centenary.edu

Humans are a social species; even the most introverted of us desires contact and connection with others. College is a time when we're exposed to many new people, often those with different backgrounds and expectations and experiences that inform our own understanding of who we want to be. We're learning to navigate relationships with roommates, with new friends and professors, and renegotiate the terms of our familial relationships. We're trying to steer our way through romantic and sexual relationships or deciding whether we want those types of connections at all. Successfully navigating human relationships is exhilarating, frustrating, rewarding, heartbreaking, challenging, and ultimately necessary. Through scientific literature, personal exploration, and small research projects, we will explore some of what the science of psychology has uncovered about human relationships of all types with the goal of developing the knowledge and skills to enhance and improve all our relationships—friendships, familial connections, romantic and professional networks.

#### SOCIAL MEDIA FOR CHANGE

JESSICA HAWKINS jhawkins@centenary.edu

Condescending Wonka. Evil Kermit. Success Kid. Grumpy Cat. These memes and many others permeate our collective consciousness. It can be difficult to pin down what might fall under the heading of "meme," a term borrowed from evolutionary biology that suggests that memes compete, reproduce, and evolve just as genes do. Whether the meme is a phrase, image or behavior, only the strongest survive. So what is it that makes a meme take off and go viral, and can we predict which will stay popular for a long time? Once armed with those answers, could you engineer virality for a higher aim-to create social change? In this class, we'll examine viral social media movements ranging from Black Lives Matter to the ALS Ice Bucket Challenge and ultimately try our hands at harnessing the power of social media in pursuit of social good.

# THE DAWN OF ROBOTS: HOW HUMAN IMAGINATION HAS SHAPED OUR FUTURE

#### KINSEY COTTON KELLY kkelly@centenary.edu

Smart phones are amazing: GPS, music, internet, alarm clock and apps; however, these devices have killed conversation-negating the initial purpose for their creation. This situation is an undesired and unanticipated consequence of technology. Any new development can produce effects in our culture which alter our present or shape our immediate and/or distant futures. In this course, we will delve into past/current technologies with an emphasis on automation and the different media which inspired their creation, and connect how those technologies have shaped our present. Sustainable automation will also be highlighted by building autonomous robots and a self-sustaining, robotic garden.

# INNOVATION: WHERE GOOD IDEAS COME FROM AND HOW THEY GOT US TO NOW

#### MICHAEL LAFFEY mlaffey@centenary.edu

Question: Do our best ideas come in a flash like a light bulb suddenly illuminating the darkness? Answer: Not so fast. This course considers stories told by Steven Johnson, an American popular science author who explores, examines, and explains the role of innovation in both natural history and human culture. First: Where Good Ideas Come From. Where we are challenged to think differently about many of our everyday, common sense descriptions and explanations about creativity and invention. Next: How We Got to Now. We explore foundations underlying many things that go unnoticed or are taken for granted in everyday life: glass, cold, sound, clean, time, and light.

#### **MORE MONEY, MORE PROBLEMS?**

#### MATT MURPHY mmurphy@centenary.edu

Money changes everything. It's the perfect tool, the root of all evil, and makes the world go around. Money don't get everything, it's true. But what it don't get, we can't use. What is money, and does it really have this much power? We will approach these questions from many perspectives, using texts, films, and music to unravel the meanings of something we all use every day. We will study how money has changed the world, trace patterns in markets, globalization, and business, and ask practical questions about what money should, should not, and can't do in our lives.



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