

First-Year Seminars

2022




Albion College

When I began college as a first-year student in 2005, one thing I immediately loved about college was the sheer amount of academic freedom I could sense around me. I had freedom to take the classes I wanted to take, explore the ideas I wanted to explore and engage with the departments I wanted to engage with. That academic freedom remains incredibly important to me, important to your faculty, and it is something we want to introduce you to as well. In this booklet, you will find dozens of potential First-Year Seminars offered for the Fall 2022 term, and we ask you to begin embracing your newfound academic freedom by ranking your initial preferences.

First-Year Seminars are special courses designed to create a stimulating learning environment in the small class setting emblematic of Albion's character and identity. These courses initiate intensive contact with our extraordinary group of faculty and emphasize discussion, personal growth, the opportunity for individualized student research projects and the development of strong communication skills. We hope that this First-Year Seminar, the first course you select, begins your journey to the lifelong learning that characterizes Albion graduates.

Inside your First-Year Seminar classroom, you will learn about a topic your professor is particularly passionate about, receive close attention from your faculty and begin integrating into your new academic home at Albion. On behalf of my colleagues, please let me welcome you to Albion College and personally invite you to begin planning this part of your First-Year Experience!

A handwritten signature in black ink that reads "Matthew Schoene". The signature is written in a cursive, flowing style.

Matthew Schoene, Ph.D.
Assistant Professor of Sociology
Director, First-Year Seminar Program

First-Year Seminars, Fall 2022

All entering students enroll in a First-Year Seminar as part of the College's core requirement for graduation. Please read through the descriptions of the seminars in this booklet and identify your first four choices among these offerings.

These seminars are offered as part of the William Atwell Brown, Jr. and Mary Brown Vacin First-Year Experience.

Ancient Aliens and Lost Civilizations: Archaeology & Popular Culture

Brad Chase (Anthropology)

Course Description—We live in an era of unprecedented knowledge about the human past. Archaeologists from nearly every country in the world have learned more than ever before about how ancient societies were organized and motivated to create magnificent monuments to human ingenuity like the pyramids of Egypt, Stonehenge—and so many others. Yet we also live in an era of unprecedented disinformation, fake news, and sensational claims presented as fact. The television show *Ancient Aliens*, for example, has run for *seventeen* seasons on the *History* channel making it arguably more accessible than any other source of information on the ancient past—despite nearly every episode being completely misleading from beginning to end. How do archaeologists know what they know? How can you distinguish actual knowledge from disinformation? And why do some tall tales about the ancient past seem to have such traction in our popular culture? In this course you will learn how to evaluate competing claims to knowledge through critical research while exploring the cultural significance of some truly wacky ideas. Students who select this first-year seminar will also be enrolled in Anthropology 101: Introduction to Anthropology.

Instructor—Brad Chase (Ph.D., University of Wisconsin-Madison) is Associate Professor in the Department of Anthropology and Sociology and has taught at Albion since 2008. He is an archaeologist whose primary research explores the Indus Civilization of ancient India and Pakistan. When he is not teaching courses at Albion or conducting research in India, he can be found chasing after a wily four-year old.

Ants, Brain, Riot ... and Universe: How does order emerge out of disorder?

Demian Cho (Physics)

Course Description—Have you ever wondered how birds flock, AI recognizes a cat in a picture, or a peaceful protest suddenly turns violent? If your answer is yes, this might be a course for you. In this seminar, we survey how orders and forms spontaneously emerge out of seemingly random interactions between elementary constituents in a group. Instead of abstract theories, however, we focus on specific examples from nature, society, economics, computer science, and neuroscience to learn fundamental concepts like network, feedbacks, bi-stability, critical transition, energy landscape. One crucial way to understand these complex systems is mathematical modeling. Thus, we will utilize computer simulations of the various model system throughout the seminar. Another goal of the seminar is to hone your academic skills through readings, discussions, and writings. You will learn how to ask the right questions, extract relevant information from sources, and approach the question to arrive at solutions.

Instructor—Demian Cho (Ph.D., University of Wisconsin – Milwaukee) is a theoretical physicist interested in the fundamental natures of both spacetime and the brain. He teaches a wide range of courses, from introductory astronomy to quantum mechanics. In the past, his research involved the unification of quantum theory and gravity, the quantum nature of black holes, and gravitational wave physics. Recently, he is interested in computational neuroscience, especially how a population of neurons ‘compute’.

Black Magic, Black Futures

Nels Christensen (English)

Course Description—This is a class for people who love to read fantasy and sci-fi—and it's especially for people hungry to read and think and talk about fantasy and sci-fi written by a new generation of Black authors. Be ready to explore worlds of magic, dragons, spaceships, and aliens imagined by and about Black folks.

Instructor—Nels Christensen (Ph.D., Michigan State University) lives in Albion along the banks of the mighty Kalamazoo River. He loves it and wouldn't want to be anywhere else.

Brown vs. Board of Education and Beyond

Suellyn Henke (Education)

Course Description—Are you considering a future as a teacher? This course will immerse you in a hands-on, interdisciplinary exploration of different interpretations of the impact of the Brown v. Board of Education. We will spend time learning about and working in local schools. One of the admission requirements for Albion College's Teacher Education Program, ten exploratory clinical experience hours, will be met through this course.

Instructor—Suellyn Henke earned a Ph.D. in Curriculum with an emphasis on Cultural Studies at Miami University. She taught high school English in Cincinnati Public Schools and taught at the University of Hawai'i-Hilo before coming to Albion in 2002. Henke is interested in experiential learning, diversity, inclusion and equity. She teaches courses in sociocultural foundations of education and secondary education.

Cheating in Sports

Julie Cousins (Kinesiology)

Course Description—Few people question whether cheating has impacted sports. The examples are so rampant that it's difficult to even summarize the presence of cheating in sports. But why have there been so many examples? What exactly causes athletes to cheat? If lots and lots of athletes are doing it, is it really cheating? Do you want to learn more about what drives people to violate the rules, use performance-enhancing drugs, or take part in some other method of cheating? This seminar is for you. We will be listening to, watching, and discussing many examples of cheating in a variety of different sports. We will have discussions on the ethical and moral implications of

the win at all costs attitude in society. Finally, this course is for all students as we will be applying these concepts of cheating and integrity to how we approach decision making in our own lives.

Instructor—Julie Cousins (Ph.D. University of Minnesota) is an exercise physiologist with an avid interest in sports and activity. She is always on the move. Outside the classroom, you will likely see her running with her husband and dog around Albion. Prior to getting her Ph.D., she coached endurance athletes at CTS for Chris Carmichael, the coach of Lance Armstrong. Her research focuses on human performance during ultra-endurance events.

Climate Justice

Thom Wilch (Earth & Environment)

Course Description—Climate change is a civil rights issue. The negative impacts of climate change are greatest on those who are disadvantaged, based on their race, identity or economic status, both here in the US and globally. Climate justice is informed by science and aims to solve the climate crisis in ways that address social inequities. In this seminar, we will look at the numbers and work to understand what the science is saying. We will examine how climate change is a 'threat multiplier' with widespread impacts on public health, food security, severe weather, forest fires, the economy, and more. We will study solutions at individual, local, national, and international levels. We'll use sophisticated online simulators to assess the efficacy of different solutions. The final team project will be to develop and propose a realistic set of climate change solutions.

Instructor—Thom Wilch (Ph.D. New Mexico Tech) is a professor in the Department of Earth and Environment and is the Faculty Director of the Center for Sustainability and the Environment. Thom is an earth scientist who conducts research on past climate changes. He has led and participated in ten research expeditions to Antarctica. Recently he spent time in Washington D.C. facilitating climate research in Antarctica. Thom lives near campus in Albion and is committed to climate resilience on campus and in the community.

Education in Action

Jessica Roberts (English)

Course Description—Education. Liberation. Social justice. Imagination. Play. Freedom dreaming. If any of those words grabs your mind and heart, this class is for you. Together, we'll explore what it might look like to create a system of education that sees and values Black and brown kids—really sees and values them. Expect to read, write, imagine, think, play, and dream.

Instructor—Jess Roberts went to eight different schools before she finished seventh grade and lived in eight different states before moving here, to Albion, MI, her favorite place in the world. She loves books and believes they can change the world. She loves kids and believes they can change the world, too. She reads, writes, teaches, wears Chuck Taylors, and directs Albion's Big Read.

Emerging Infectious & Communicable Diseases

Ola Olapade (Biology)

Course Description—The pandemic occurrence of the Coronavirus (Covid-19) with its debilitating consequences on global public health as well as the destabilization of normal social and economic activities world-wide reemphasizes the inevitable co-existence between humans and microorganisms. To effectively mitigate against the various deleterious influences of pathogenic microbes on global populations, it is important to understand in-depth the microbial world, regarding the etiology, epidemiology and prevention as well as control of common infectious and communicable diseases. This seminar will therefore broadly explore various infectious diseases caused by microscopic germs (such as bacteria, viruses and protozoa), transferred via vectors and/or fomites (such as malaria and Lyme disease) as well as those directly communicable from person to person (including Influenza, Ebola, HIV, Herpesvirus and the human papillomavirus) through group discussions, lectures, video documentaries and relevant literatures in the fields of microbiology, virology and public health.

Instructor—Ola A. Olapade (Ph. D., Kent State University) is a microbiologist with interests in Microbial Ecology, Environmental Microbiology, Bioremediation and Public Health. He teaches General Microbiology, Environmental Microbiology, Virology, and various seminars in Epidemiology and Public Health as well as the Virus Hunters and also contributes to the introductory sequence courses in the department. His research generally involves delineating the occurrences of microbial assemblages and enzymatic activities in various environments. For relaxation, he enjoys various sporting events, spending time with his family and travelling.

Fashioning the Self, Weaving Community

Nancy Demerdash-Fatemi (Art History)

Course Description—Focusing on the histories and theories of fashion, students will discuss and debate how styles evolve in various socio-historical contexts, what makes a trend "trendy", and how the self comes to be defined in relation to the other, in and through sartorial modes. What is the semiotic value of fashion and how does what we wear make meaning in the world? We will probe into the historical and conceptual construction of luxury and the exotic/exoticism, through specific textile case studies such as silks, embroideries, lace, velvet, etc. The metaphor of fabric is also used to encapsulate social bodies, as in the phrase "social fabric." And so in that vein, we also will consider how various communities are defined by their garments--faith-based communities, uniforms worn by those in disciplinary settings (e.g prisons, schools, or militaries), or global cultural groups. Additionally, we will examine clothes in relationship to concepts of performativity, embodiment, sexual orientation and gender identities. As freshmen embark on their educational journey at Albion, these students will be asked to reflect on how they will curate their acquisition of knowledge, and fashion themselves, as individuals and global citizens.

Instructor— Nancy Demerdash-Fatemi (Ph.D. Princeton University) is an Assistant Professor of Art History and has taught in the Department of Art & Art History since 2018. Having lived in Paris and Cairo, in her scholarly and intellectual life she is an art and architectural historian of the modern and contemporary Middle East and North Africa. Although she is an appreciator and critic of both fine art and fine fashion in her career, since her early childhood she's enjoyed the haptic thrills of "dressing up" with vibrant, sartorial flair. But when she's not wearing her cerulean velvet blazer and rose gold oxfords in the Bobbitt Visual Arts Center, writing about Moroccan courtyard houses or teaching about diasporic, exiled artists in Europe, she can be found at home with her husband, wearing a cozy, coral velour sweatsuit, impersonating robots and reading about farm animals to her energetic, cuddly and curious, toddler fraternal twins.

Fly Me To The Moon!

Nicolle Zellner (Physics)

Course Description—This class includes the history and future of space exploration and will discuss topics related to the science of spaceflight, different countries' efforts to explore space, human spaceflight, gender and diversity in the astronaut/cosmonaut/taikonaut corps, spacecraft missions, and exploring planets, moons, and asteroids in our solar system and beyond. A trip to Washington, D.C., to tour NASA Headquarters, the Smithsonian Institution meteorite collection, and the Smithsonian Air and Space Museum, including the Udvar-Hazy Center is planned. Field trip fee will apply.

Instructor—Dr. Nicolle Zellner is the Herbert and Grace Dow Endowed Professor in the Sciences and the Chair of the Physics Department. She teaches introductory and advanced astronomy and physics courses, and her research interests focus on understanding the impact history of the Earth-Moon system and how those impacts affected the conditions for life on Earth. She studies lunar impact glasses to interpret the bombardment history of the Moon (and Earth), and a second project focuses on understanding how the chemistry of simple molecules is affected by impacts. Zellner was a member of the 2005-2006 ANSMET team that searched for meteorites in Antarctica, where she and the team spent two months collecting over 800 meteorites! Zellner was a member of the scientific ground crew during NASA's STS-67 Astro-2 mission in 1995, and she recently completed a 20-month detail working at NASA Headquarters. Zellner's PhD is from Rensselaer Polytechnic Institute, where she received the school's first Multidisciplinary PhD. In 2018, she was named an Albion College Teacher of the Year, and in 2021, she received the Carl Sagan Medal for Excellence in Public Communication from the American Astronomical Society. Her research has been supported by the American Astronomical Society and the National Science Foundation and is currently supported by NASA.

Ford: The American Business Juggernaut

Stephen Young (Economics & Management)

Course Description—In 1903, Henry Ford forever changed transportation in the United States when he launched the Model A. Soon after, Ford altered how every manufacturing company approached the assembly process when he introduced the assembly line. For the next 100+ years, Henry Ford and Ford Motor Company continuously introduced radical processes that are still in practice today across multiple industries. In this class we will investigate and explore how Henry Ford and the Ford Motor Company changed the landscape of American manufacturing and transportation. We will focus on the business side of Ford Motor by discussing the manufacturing process, the management and marketing strategies used, and the ethical challenges that faced this growing enterprise. This class will also explore Henry Ford's views on race and ethnic relations and how those negative feelings affected both Ford and his company. Comparisons will be made to how Ford Motor Company operated in the early 20th Century and how those practices apply to organizations of the 21st Century. A field trip to a Ford manufacturing plant is also planned.

Instructor—Stephen Young is an Assistant Professor in the Economics & Management Department. He is excited to bring his vast experiences to Albion College that includes an eight-year United States Air Force career flying the F-15E Strike Eagle, over 12 years of experiences in management and project management in corporate America, and five years of teaching experience in Higher Education. He earned his Bachelor's degree from Ole Miss and his PhD from Indiana Tech. In his free time, he enjoys spending time with his wife, playing golf, playing guitar, working on his 1957 Ford F-100 pickup truck, and completing the various tasks around his farm in Albion.

Hawaii: Geology, Ecology and Culture of the Tallest Mountain on Earth

Carrie Menold (Earth & Environment)

Course Description—This is a discussion-based class exploring the geology and cultures around the world's tallest and biggest mountain... Mauna Kea (Hawai'i). Most people think Mt. Everest and it IS tall but measured from its ocean base Mauna Kea is even bigger! A fundamental question we will seek to answer is why mountains exist and why are these two mountains so much taller than any others. We will investigate the geological forces that create (and destroy) mountains, and learn why their locations are not random. Hawai'i also has a distinct cultures linked with their unique geology and ecology. We will spend time learning about Hawai'ian cultural practices and their link to mountain and volcano environments — for example, the Hawai'ian goddess Pele's association with the volcano. Several other mountain-related themes will also be examined, including their presence as natural barriers that both invite and impede exploration, their importance as unique ecosystems, and their role as nature's water towers. As we explore these topics we will do so with a focus on college academic preparation and transition from high school: instruction in college-level reading, writing and class discussion, time-management, finding and using sources for research papers as well as participate in a variety hands-on activities. In January, (pandemic permitting) students will travel to the big island of Hawai'i to examine mountain-building processes, the active volcano and hopefully its hot lava, and a unique mountain culture. On the trip, we will travel across the island, from the mountain tops to the beach, and we will be outside everyday hiking to explore the geology and its influence on the culture. Field trip fee applies.

Instructor—Carrie Menold (Ph.D., UCLA) is the chair of the Earth & Environment Department. Her teaching focuses on rock and mineral studies as well as environmental geology courses. She uses geochemistry and field work to study mountain-building, looking at the first rocks to collide as mountains begin to form. Those rocks end up in the middle of the tallest parts of mountain ranges as collision proceeds so her field study areas are up on the Tibetan Plateau, in the high Himalayas of India and in the Swedish Arctic.

Imperial Vienna: Music, Art, Mind and Power

Clayton Parr (Music)

Course Description—In this class, you'll use the techniques above to examine a variety of topics centered on intellectual, cultural, social and artistic life in one city - Vienna - and the time period roughly between 1780 and 1914. You'll read, write about and discuss the work of musicians, artists, architects, philosophers, psychologists and politicians, and discover the foundations they laid for modern culture that endure to the present day. In travel to Vienna at the end of the semester (scheduled for Dec 14-21), you'll experience some of this culture firsthand, through museum and building tours, concerts, and reflection on how your travel has enhanced your understanding of these issues. Field trip fee applies.

Instructor—Dr. Clayton Parr is the choir director at Albion. A long time ago, he graduated from Albion with majors in music and physics. He went away and taught in a number of other places (most of them in various parts of the Midwest) before returning to Albion to join the faculty in 2012. His research interests include music of Georgia (the country, not the state.) He also directs the Battle Creek Community Chorus, Michigan Educators Male Ensemble, and Alioni Georgian Choir of Chicago. When he's not doing music, he's usually in a kayak, at the ballpark, or looking up something obscure. He walks to work every day and likes it that way.

Leadership

Jocelyn McWhirter (Religious Studies)

Course Description—Leadership is not so much an inherited trait as a learned skill. Students in this seminar will develop their leadership skills, starting with self-awareness and self-care and continuing with social skills such as observation, empathy, communication, visioning, planning, collaboration, and conflict management. As they learn these skills, they will practice them in their daily lives and end the semester ready to make a difference as competent leaders.

Instructor—Jocelyn McWhirter never thought of herself as a leader. Slowly but surely, however, she learned the necessary skills, starting with listening carefully to people and memorizing their names. At Albion College, she has led the Holocaust Studies Service Learning Project, the Newell Center for Teaching and Learning, the faculty marshals' team, and the Religious Studies Department, where she teaches Bible and Judaism.

Living the Life Fantastic: The Fantasy Literature and Authors That Have Captured the World's Imagination

Mark Hoffland (Theatre)

Course Description—Into Harry Potter? Game of Thrones? Lord of the Rings? Or even The Walking Dead? Enjoy reading about wizards, witches, dragons, dwarves, vampires, and zombies? What do you know about the authors who imagine them, and the real-world events that inspire them? In this course, we will explore the biographies and shared inspirations of fantasy authors J.K. Rowling (Harry Potter), George R. R. Martin (Game of Thrones/A Song of Ice and Fire) J.R.R. Tolkien (The Lord of the Rings), and Robert Kirkman (The Walking Dead), as well as lesser known authors, such as Terry Pratchett (the Disc World series) and Christopher Moore (Bite Me and Scare Bleu). We will watch film adaptations, listen to interviews with the authors, and discover the inspirations for these unique worlds, characters, and storylines. We will use the medium of fantasy fiction to discuss contemporary social issues; we will read one of Pratchett's comic novels; and we will create our own fantasy-based graphic short story using Comic Life software.

Instructor—Mark Hoffland has taught in the Department of Theatre since 2004. The ultimate “generalist”, Mark has directed, designed, and built many productions in a long career. He has produced theatre with people of all ages and experience levels. He has judged on all levels of the MIFA one-act competition for three decades. He has been enjoying fantasy and science fiction novels since high school.

One Does Not Simply Walk into College: Life Lessons from Tolkien & the Middle Ages

Christopher Riedel (History)

Course Description—J.R.R. Tolkien is famous today as creator of the modern fantasy genre and a source of wonder and delight to millions, but he was also a brilliant professor of medieval history, literature, folklore, and linguistics. We'll explore Tolkien's life and works, from *The Hobbit* to *The Lord of the Rings* and beyond, as a window on both the Middle Ages and what the medieval world means to us today. For instance, how might medieval readers of the epic *Beowulf* understand the lurking dragon? How did Tolkien use dragons to represent the horrors of industrialization and modern warfare? We'll examine the historical, religious and literary roots that Tolkien drew on to create the first immersive fantasy world, while critiquing modern uses and stereotypes of the Middle Ages from politics to television series. We'll explore Tolkien's own moving insights into the human condition that have made his literary masterpieces timeless classics, drawn from his experience of both the medieval

and the modern worlds. Students will read primary sources from the Middle Ages along with Tolkien's own works, watch depictions of his stories, and conduct original research into the medieval origins of some aspect of Tolkien's world that appeals to their own curiosity and imagination. Previous reading of Tolkien's works is encouraged but not required. Students who choose this course will also be enrolled in History 102: Ancient & Medieval Worlds.

Instructor—Chris Riedel (Ph.D., Boston College) is starting his sixth year of teaching at Albion College, where he covers most of the stuff that happened before Columbus (and occasionally some stuff after) – from ancient Egypt to the Roman Empire to vikings and crusaders. His research and teaching interests include religious reform movements, wealth and charity, biography, Islamic-Western interactions, and stories of miracles and magic. When not teaching or spending time with old medieval books and ruins, he enjoys fantasy, science fiction, cooking, baking, and catering to the whims of his rescue greyhound named Malibu.

Public Policy in Film

Drew Christopher (Psychology)

Course Description—One of the many benefits of living in a democracy is the freedom to hold your own opinion on an issue. In this course, we will examine a number of current issues being debated by public policy experts in the United States. The purpose of examining these concerns is not to provide answers to any issues we are currently facing, but rather, to help you learn how to formulate a position on these various issues by considering multiple perspectives on each one. To do so, we will view films that deal with topics including but not limited to health care, corporate ethics, foreign policy, and drug legalization. Through film viewings, readings, papers, and class discussions, you will explore not only important current issues in public policy, but more importantly, you will learn how to formulate an opinion using data from various sources. In doing so, you will also learn how almost any source of information can be biased, and therefore, you will need to understand how to try to correct for that bias. Students who select this course will also be enrolled in Psychology 101: Introduction to Psychology.

Instructor—Drew Christopher is a teacher in the psychology department. He has taught at Albion for 21 years, teaching not only in that department, but in the Honor's College and of course the First-Year Experience Program. Drew enjoys teaching first-year seminars because they give him the chance to meet students with a wide range of interests and help them find their direction in college. Drew was an undergraduate student at Stetson University (in Florida) and he got his graduate degrees from the University of Florida. Outside of school, he likes working out (sometimes) so that

he can eat the often less-than-healthy dishes he likes to cook and not feel guilty, learning about history (especially that of the Middle East), traveling (New Orleans and Las Vegas are his favorite American destinations), and entertaining his two beagles. He also likes to watch and play sports and is a fan of SEC football and Boston-area professional teams.

Quacks, Remedies and Cures: Treating Illness through the Ages.

Marc Roy (Biology)

Course Description—Humans have been getting sick since they inhabited the earth. What did they do to treat each other or themselves? We will study the history of remedies from ancient to modern times and in several cultures. We will also learn how to discern which remedies were and are real medicines and which were quacks (fakes). *This course is not just for pre-medicine students!* What makes a medicine real? How were home remedies in different cultures made and did they really work or were they placebos? Even today, substances are advertised as though they are medicines, but they are not. We will also walk through time in downtown Albion, learning about some of the early apothecaries and businesses that produced remedies.

Instructor—Marc Roy (Ph.D. University of Wisconsin-Madison) is a curious neuroscientist with broad interests. He taught students in the biology department and first-year seminars at Beloit College for 13 years before moving into academic leadership. He spent five years in Iowa, eight years in Maryland, and five years in Albion and now he has returned to his first passion- teaching and conducting research with students. Marc and his wife Michelle live just a few blocks from campus.

Reel vs Real Latinxs: Representations in U.S. Film and TV

Lucia Soriano (Women's, Gender, & Sexuality Studies/Ethnic Studies)

Course Description—In this course, students will be introduced to the (mis)representations of Latinx people in U.S. film and television. Some of the questions students will explore in this seminar are: What is the "x" in Latinx? Why are Latinas portrayed as "spicy"? Where are all the rich Latin@ characters in film and tv? Are there Latinx superheroes? Are all Latino men "machos"? Students will explore these questions and more through readings, short writing exercises, watching media, and class discussions. Students who select this first-year seminar will also be enrolled in Dr. Soriano's course, WGS 111 Introduction to Women, Gender, and Sexuality.

Instructor—Dr. Soriano (PhD, Washington State University) was born and raised in Southern California and is the proud daughter of Mexican immigrants. She grew up fascinated by the Hollywood entertainment industry which led her to want to study U.S. popular culture. She is a teacher-scholar who is committed to creating a classroom environment where students' lived-experiences are centered as vital contributions to the learning experience. In Fall 2022 and Spring 2023, Dr. Soriano will be Visiting Assistant Professor in Ethnic Studies and Women's, Gender, and Sexuality Studies at Albion College.

Risking Fantastic Failure: the Ceramic Change

Shauna Merriman (Art)

Course Description—Ceramics is at least 30,000 years old and has shaped art, culture, science, medicine, space exploration, and artificial intelligence. First, in theory, baskets were made leak-proof by smearing them with clay - a sticky mud that shrinks tight. A chemical change known as dehydroxylation happened when these got too close to a fire. The "ceramic change" technology has produced artificial joints, fiber optics, body armor, biomedicine, electronics, and pottery. Would any of this scientific discovery and advancement have happened without failure, and how can we learn to take risks despite fear?

We will make ceramic art and explore some of the oldest and newest art technologies at Albion College: pit firing, 3D printing, and virtual reality. Pandemic permitting, we'll travel to Lake Michigan to dig clay and attend a VR experience. Back home, we'll process the clay, make pottery, watch glaze melt at almost 2000 degrees F, and show the artwork on campus. Making art is an opportunity to cultivate curiosity and creativity while practicing work strategies that address the paralysis of perfection across disciplines.

Instructor—Shauna Merriman is a native of the California Mohave Desert, where borax and soda ash are mined and home to Death Valley. She received her art degrees from two of the oldest ceramic art and ceramic science schools in the US at the New York State College of Ceramics at Alfred University and The Ohio State University. She did residencies in the Ohio clay belt, including at Belden Brick Company, where the factory digs their clay from beds of material the size of football fields. She has a post-graduate art degree from the Kunstakademie in Dresden, Germany, where she lived as a studio artist. Shauna just spent her first summer in Michigan on Lake Michigan making art and digging clay.

Science, Technology, and Society

Kevin Metz (Chemistry)

Course Description—If you take a moment and think about a typical day, you will quickly see that it is actually quite extraordinary. Did you wake up in a room with a comfortable temperature? Did you drink a glassful of cool water? Did you read while it was still dark outside? Did you use a car, a computer, or a smartphone? All of these mundane, everyday occurrences are the result of progress made in science and technology. As the result these advances, we can now control the indoor weather, light, sound, and so many other things around us. In this course, we are going to study some basic materials (for example, ice, sand, metals) and explore how our modern society was developed based on technologies built from them. If you like science and gadgets, with a little history thrown in, then this might be the seminar for you.

Instructor—Dr. Kevin Metz is a professor of chemistry and a perpetually curious science nerd. As a child, armed with a pocket microscope, he sought to understand the physical world we live in. He peppered his parents with questions such as “What is wood made of?” and “How do they make carpeting?” His mother’s constant response was “you can read, you can teach yourself.” In the process of learning for himself two things happened. Dr. Metz fell in love with stories about science, scientists, and science fiction; and, he completed a Ph. D. in Materials Chemistry at the University of Wisconsin-Madison. Now, armed with some understanding of how things are put together, Dr. Metz works with student researchers to create new materials to solve environmental problems.

Science, Truth and Other Enigmas

Jeremy Kirby (Philosophy)

Course Description—There is a substantive difference between, for example, astrology and astronomy. The latter conforms to the practices of our best scientific thinking, while the former is a pseudo-science at best. But how might one explain the difference between pseudo-science and real science? It might be suggested that scientists rely upon observation and obtain better predictive results than pseudo-scientists. Astrologists, however, rely upon observation, and they are rarely mistaken in their predictions. Perhaps, then, what distinguishes pseudo-science from real science is that the hypotheses of the latter may be disconfirmed while the ‘conjectures’ of the former will hold, come what may. However, Charles Darwin’s critics accuse him of dealing in platitudes as well, and few of Darwin’s supporters would want to classify him among the pseudo-scientists. The principle of natural selection is all about “the survival of the fittest.” And, as the

critics will ask, who are the fittest, if not those who survive? Distinguishing pseudo-science from science is, thus, easier said than done. But this is precisely what we shall endeavor to do in this course.

Instructor—Jeremy Kirby teaches and writes on issues concerning the history of philosophy and the history of science. He has published two books concerning Aristotle’s approach to science and a number of articles relating to the history of philosophy. He lives in Albion, MI.

So You Want to Work in Healthcare?

Craig Streu (Chemistry & Biochemistry)

Course Description—Healthcare is not just a profession; it is the biggest business in America. This course is something of a whirlwind tour of how healthcare in the United States works and the roles that healthcare providers, scientists, and corporations have played in shaping the system through time. This class is based in the science of medicine, but get ready for some history, ethics and economics as we progress through the last two centuries of healthcare from snake oil pharmaceuticals and the anatomy riots sparked by physician-sponsored grave robbing, to the modern opioid crisis. For better or worse, you will walk away from this class with a far better understanding of the business, practice, and science of human medicine. Students who select this course will also be enrolled in Chemistry 154 and Biology 210 through the Wilson Institute.

Instructor—Dr. Craig Streu (Ph.D., University of Pennsylvania) is a biochemist with an avid interest in molecular interventions for human health, otherwise known as drugs. He runs a bustling research lab where he works with students to develop therapeutic drugs of all types, although his most recent work focuses on cancer drugs and antibiotics. When he’s not in the lab he enjoys soccer, cycling, hiking and generally being outdoors with his family.

The American Way of College

Andrew Dunham (Registrar)

Course Description—Colleges and universities in America are unlike any other educational institutions in the world. The American way of college offers far more than just classroom-based learning for a lucky few who can get in. As American society changes so does the role of the college. From student protests to popular music, social change movements to breakthroughs in science, what happens at our small private colleges and large state schools—has a tremendous impact on the lives of all Americans. In this seminar we will explore the social, historical, and political development of higher education in America through the areas of admission,

money, athletics, student experience, and public opinion. We'll take a critical look at Albion and compare it to different types of colleges in the United States and around the world.

Instructor—Drew Dunham (Ph.D. University of Northern Colorado) is the associate dean of academic affairs and registrar of the College. He has spent many years in higher education trying to unravel the mysteries of student retention, curriculum, and academic policy. An avid musician, he is the associate conductor of the Albion College Symphony Orchestra and principal French horn. Drew lives near campus with his wife, a vast array of animals and too many gardens.

The Horror!: An Interdisciplinary Exploration of Zombies, Vampires, and Other Monsters

Allison Harnish (Anthropology)

Course Description—Practically every culture in every epoch of human history boasts monstrous folktales, literature, art, and mythology that haunt the imagination. Some are more real than others—take, for instance, the mummies of ancient Egypt and the witches of Salem, versus Bram Stoker's *Dracula* or Robert Kirkman's *The Walking Dead*. Yet, all speak to the social anxieties of their time—e.g., raging culture wars, concerns about science and technology, distress over communicable disease or environmental degradation, mistrust of government and/or corporations, and fears of “the Other” that manifest themselves through racism, sexism, homophobia, xenophobia, and other forms of oppression and intolerance. In this seminar, we will investigate the historical development of certain monsters from their folkloristic origins to their modern iterations. We will study horror movies new and old—including George Romero's *Night of the Living Dead* (1968) and Jordan Peele's *Get Out* (2017). We will draw on multiple academic disciplines in order to understand how even the most far-fetched of monstrous creatures are real in their capacity to reflect back onto societies their deepest fears and their darkest secrets. Students who select this first-year seminar will also be enrolled in Anthropology 101: Introduction to Anthropology.

Instructor—Alli Harnish (Ph.D., University of Kentucky) is an assistant professor of cultural anthropology. Her research and teaching interests include gender, globalization, environmental politics, and indigenous communities. When she's not teaching at Albion or conducting research in Zambia, she can be found playing with her dogs, attempting DIY home projects, and enjoying the great outdoors.

To Sleep or Not to Sleep

Tammy Jechura (Psychology)

Course Description—College life is full of exciting and important new experiences, including classes, sports, and a variety of social interactions. Sometimes it might seem as though there aren't enough hours in the day to enjoy all the opportunities available, but the only way to lengthen the day for activities is to reduce the time at night for sleep. Is sleep just a waste of time? Can we really sacrifice sleep for “more important” things?

This seminar will explore the importance of sleep and some of the factors that influence it. You will learn how sleep (and lack of it) can drastically impact learning, memory, performance in sports, sociality, and mental and physical health. We will examine the role of timing cues in our environment, from natural cues such as sunrise and sunset to the common alarm clock. We will explore how plants and animals, including humans, use environmental time cues to tell time and to navigate their world. Discussions will cover the evolutionary significance of sleep patterns among a variety of species, especially humans. We will also talk about the history of time-telling, from flower clocks and sundials to today's atomic clocks. Our bodies' natural daily cycles, circadian rhythms, and how they are affected by environmental time cues and other factors will be a significant part of the class as well. To tie all the topics from the class discussions together, class participants will be both active researchers and participants in studies of human sleep/wake cycles, possibly including studying jet lag with a trip to Europe. Field trip fee will apply.

Instructor—Tammy Jechura (Ph.D., University of Michigan) began exploring nature around the time that she started to crawl and has never stopped. Her love of psychology and biology has been a driving factor in the direction of her studies. As an undergraduate, she studied homing pigeons' natural navigational abilities. Her graduate work examined the role of social cues in an animal model of jet lag recovery. As the health psychologist at Albion College, she hopes to spread her enthusiasm for scientific exploration to her students through hands-on activities and practical application of class information. Besides nature, her interests include animal behavior, photography, outdoor activities, and painting.

We Cannot Survive Without Water

Joseph Lee-Cullin (Earth & Environment)

Course Description—The Cuyahoga River burst into flames (for the thirteenth time) on June 22, 1969. Switching to the Detroit River poisons the water for the residents of Flint, MI. Fertilizer from Illinois, Indiana, and Iowa traveling through the Mississippi River devastates the Gulf ecosystem. Michiganders are warned to avoid foam in river and on lakes.

Water is among the most critical of resources for humanity, yet our post-industrial society is full of stories like those mentioned above. So, what's going on? What's in our water? How is it getting there? How is Iowan corn directly connected to Bayou shrimp? What are we drinking if so much of the water at the surface of the Earth is compromised? In this course we will work to understand how water moves, what it carries, and how our communities interact with water. One local-ish field trip in October, pandemic permitting, and several visits to our nearby Kalamazoo River.

Instructor—Joe Lee-Cullin is an Assistant Professor in the Department of Earth & Environment. They study surface and groundwaters and the effects of human landscape modifications on these natural features. They were born and raised in southeastern Iowa where they gained an appreciation for the scale of human modifications of the landscape. In their free time they like to nap, play disc golf, vermicompost, adventure through Dungeons to make friends with Dragons, watch horror movies with their spouse, annoy their cats with affection, and investigate eerie sounds emanating from the mysteriously bare circle in their front yard at the witching hour.

