



HONORS

course descriptions

Spring 2027

*Courses and descriptions are subject to change.

Table of Contents

UK CORE: HUMANITIES..... 5

 HON 151-001: Healthcare Ethics.....5

 HON 151-002: Mood and Meaning5

 HON 151-003: Considering Death & Dying in America5

 HON 310-002: Environmental Ethics6

 HON 310-003: Genesis and Gender *Course intended for 3rd- and 4th- year students only, or with permission of instructor*6

 HON 310-004: Shadowing and the Culture of Medicine.....6

UK CORE: STEM..... 7

 HON 152-003: Why We Get Sick7

UK CORE: SOCIAL SCIENCES 8

 HON 251-002: Psychology, Politics, and Society8

 HON 251-003: Sociocultural Dimensions of Health and Medicine: A Primer for Future Practitioners8

 HON 251-004: Modern Material Culture and the Archaeology of Us.....8

 HON 251-005: Geopolitics in Kentucky Business9

 HON 251-006: Community Research in Action.....9

 HON 330-001: Positive Organizational Psychology9

UK CORE: ARTS AND CREATIVITY 11

 DES 100-006: Design in Your World.....11

 HON 252-001: Short Form Literature and the Art of Meaning11

 HON 252-002 & 003: Moving Images: Intersections of Art, Experimental Film, and Home Movies.....11

 HON 252-004: Graphic Narratives and the Art of Storytelling12

 HON 252-005: Peacebuilding and the Arts.....12

 HON 252-006: Practice of Pop Music.....12

UK CORE: US CITIZENSHIP 13

 JOU 101-002: Introduction to Journalism.....13

 JOU 256-002: News Literacy in the Age of AI.....13

 HON 360-001 & 002: Media and Civil Society13

UK CORE: STATISTICAL INFERENTIAL REASONING 14

 STA 381-002: Engineering Statistics – A Conceptual Approach14

UK CORE: GLOBAL DYNAMICS..... 15

HON 350-001: Middle Eastern & South Asian Politics.....	15
HON 350-002: Europe Since 1989	15
PLS 103-003: Plants, Soils, and People: A Global Perspective	15
HON 301 ADVANCED SEMINAR	16
HON 301-001: Health in Appalachia.....	16
HON 301-002: Adam, Eve, & AI	16
HON 301-003: Stigma in Health and Society	17
HON 301-004: Mental Health in High Performance.....	17
HON 301-005: Language and the Brain.....	17
HON 301-006: Bylines and Backstories	17
SERVICE LEARNING and EXPERIENTIAL LEARNING	18
HMN 303-001: Contemporary Issues Concerning the Humanities	18
HMN 303-002: City Stories: Empathy at Work in the Lexington-Fayette Urban County Government.....	18
HON 100-001: Service Learning for Singletary Scholars	18
HON 390-001: Encountering Immigrant and Refugee Lives	19
HON 390-002: Want to Build a Tech Company?	19
HON 394-001: Applying Real World Project Management in Service to a Nonprofit	19
HON 394-002: Leading Projects to Improve Organizations	20
HONORS COURSE SECTIONS IN THE DEPARTMENTS	21
BIO 303-004: Introduction to Evolution.....	21
BIO 315-005: Introduction to Cell Biology	21
BIO 325-004: Ecology	21
BIO 385-003: CURE in Biology: Exploring environmental DNA (eDNA) using DNA sequencing	22
CHE 107-003: General Chemistry II.....	22
CHE 565-002: Environmental Chemistry.....	22
ECO 201-006 Principles of Economics I: Market Failures, Nonprofits, and Social Impact	22
ISC 325-001: Strategic Audience Insights	23
MA 322-008 Matrix Algebra	23
ME/AER 220-004: Engineering Thermodynamics I.....	23
PGY 412G-002: Honors Principles of Human Physiology	23
TEK 100-202: Collaborative Intelligence: Understanding and Using Modern AI	24

UK CORE: HUMANITIES

HON 151-001: Healthcare Ethics

Dr. Daniel Kirchner | MWF 11:00-11:50

In this course, we will delve into the professional and personal ethics involved in health care. Starting from the viewpoint of prospective health professionals, we will learn the ethics and practice of care. We will then explore healthcare-related ethical challenges in the areas of research (animals and humans), end of life (euthanasia, death, and dying), beginning of life (reproduction, cloning, genetic testing), and justice (treatment and access to healthcare). Our discussions will be framed through engagement with historical and contemporary cases and aimed at developing ethical practices for future health care professionals.

HON 151-002: Mood and Meaning

Dr. Alex Gergely | MWF 12:00-12:50

How does art convey feeling? We often say that a book or movie “speaks” to us or that a story has “stuck around” long after we’ve left it. Yet sometimes a creative work misses the mark completely, leaving us unaffected. What gives? This course considers what it means to be affected by the moods and emotions of storytelling—by films, novels, poems, short stories, and everyday aesthetic objects. These creative forces retain a certain mood and often transmit those moods to us. Thinking intentionally about this question of affect and reception, this class will encounter a wide variety of narratives heralded as “moving” and a few that are intentionally “flat.” We will seek to understand how these works go about fostering feelings, which necessitates asking formal questions (How does this text operate?) and theoretical, even existential ones (*Why* do I feel this way?). As we will discover, artistic meaning-making is both conceptual and affective, concrete and mysterious. This leads us to an unavoidable question: What is the point of it all? To feel things, to be entertained? Or is there some greater purpose to all this art? We might discover that our feelings are not just diversions and that the stories we love (and hate) can change us.

HON 151-003: Considering Death & Dying in America

Dr. Alex Gergely | MW 3:00-4:15

What does it mean to die in America today? What is the “American way of death?” What does studying death afford us as humans? What do we miss by ignoring it? How might thinking more intentionally about it make stronger communities? Whether going into the medical field, business, journalism, or chemistry, what role does death play in our field, and how might it inform our work? How might being an audience to certain art on death instruct us on how to live more meaningful lives?

Looking at different creative and critical artifacts from the past and present will give us context and inspire us to reflect on how and why death remains important in both our art and lives. There is a sort of obvious existential “truth” to death, which is worth pursuing, especially for an honors course that is interested in what it means to seek wisdom and understand the self. But rarely do we study or talk about the phenomenon intentionally. This course can be significant for many pre-healthcare and non-humanity students because, while they may encounter the facticity of death in their vocations, they may never be tasked with stopping to consider its meaning or import in their classes. Studying and learning about death can bring us together and create stronger ties and healthier communities. The course will also feature a field trip to the historic Lexington Cemetery.

HON 310-002: Environmental Ethics

Dr. Daniel Kirchner | MWF 1:00-1:50

This course engages an inquiry into the historical, religious, philosophical, and scientific roots of the Western approach to nature, evaluates the ethical approaches to the environment that grow from those roots, and considers whether and how more fruitful interactions might be cultivated from other perspectives.

HON 310-003: Genesis and Gender *Course intended for 3rd- and 4th- year students only, or with permission of instructor*

Dr. Tara Tuttle

MW 3:00-4:15

Religious narratives sometimes become embedded in a culture in ways that shape the experiences of those both inside and outside the religious communities from which they came. The account of Adam and Eve described in the first three chapters of the book of Genesis is one such story that has been deployed in divergent ways over centuries to explain, justify, or resist beliefs about gender. Writers of political, religious, historical, and literary texts have challenged or defended gender-based customs by wielding Genesis 1-3 in their assertions. Examining selected texts from early Christian writers such as Tertullian and Augustine, Reformation figures Calvin and Luther, abolitionists Sarah Grimké and Elizabeth Cady Stanton, anthropologist and creative writer Zora Neale Hurston, contemporary theologians Riffat Hassan and Phyllis Trible, and poets and novelists possibly including Milton, Hemingway, and Morrison, we will discover and discuss real and imagined communities that used this religious narrative to interpret their societies or to advocate for better ones. We will adopt an intersectional approach and consider also how messages about race, ethnicity, and sexuality have been shaped by interpretations of Genesis 1-3, and we will consider how these verses still appear in ongoing debates about divisions of labor, civil rights legislation and activism, reproduction, relationships, and identities, including nonbinary, gender-nonconforming, and/or LGBTQIAP+ persons. Our collective inquiry will address the following questions: What do we know about gender and how do we know it? How do religious beliefs about gender shape communities? How have understandings of Genesis 1-3's implications for gender norms changed over time?

HON 310-004: Shadowing and the Culture of Medicine

Dr. Claire Clark | TR 11:00-12:15

What is medical culture, and how do we become accustomed to it? Shadowing is both an orientation to the “culture of medicine” and a guide for aspiring physicians who hope to make that culture more equitable and just. We prepare to shadow with an interdisciplinary introduction to humanistic critiques of Western medical culture, including insights from the history of medicine, narrative medicine, and the visual arts. Next, we observe clinical settings through a series of creative and directed exercises that help us attend to social determinants of health. We reflect on our observations by writing personal statements that place our clinical experiences in cultural and structural contexts. Finally, we respond by identifying methods for taking action and affecting structural change in healthcare.

UK CORE: STEM

HON 152-003: Why We Get Sick

Drs. Sanda and Florin Despa | TR 11:00-12:15

Open to students of all majors, this course explores the genetic, lifestyle, and environmental factors that shape human health and contribute to disease. Through a mix of lectures, group discussions, debates, and hands-on activities, students will develop scientific literacy, gain experience interpreting real-world health data, and think critically about questions such as:

- Why do some people get sick while others stay healthy?
- How does damage at the genetic or cellular level lead to disease, especially with aging?
- Are we what we eat, and how much does diet really affect disease risk?
- Does where we live influence our health?
- Why do chronic diseases like diabetes, heart failure, and Alzheimer's so often appear together?
- How are scientific and technical innovations transforming healthcare, improving disease treatment, and extending human longevity?
- How should emerging medical technologies (for example, gene therapy) be weighed against ethical considerations?

By the end of the course, students will have a deeper understanding of the science behind health and disease and the tools needed to engage thoughtfully with health issues facing individuals and society.

UK CORE: SOCIAL SCIENCES

HON 251-002: Psychology, Politics, and Society

Dr. Sherelle Roberts | TR 3:30-4:45

Psychology, Politics, and Society explores the intersection of psychology and politics, examining how cognitive processes and biases influence political beliefs and behaviors. Students will delve into themes such as information processing, cognitive bias, dehumanization, the impact of media on political attitudes, psychological aspects of crime and punishment, and the cognitive underpinnings of fiscal decision-making. Students will gain insights into the psychological mechanisms driving political dynamics and decision-making through lectures, discussions, and class activities.

HON 251-003: Sociocultural Dimensions of Health and Medicine: A Primer for Future Practitioners

Dr. Terry Stratton | TR 9:30-10:45

Along with physiological and biological factors, cultural values, attitudes, and belief systems are essential in shaping our definitions of “normal” human function. This seminar will acquaint students with the major social, cultural, and behavioral phenomena that guide and influence health-related behaviors and outcomes – including our perceptions of what constitutes health and illness.

For those pursuing health professions careers, this course introduces learners to social “structural” forces which impact our perceptions of health and illness and the larger social contexts in which related behaviors occur - concepts now included in many professional school admissions tests and board certification exams.

Broadly speaking, course content will address the following questions:

- How does “health” become culturally defined? What is “normal”?
- From what sources do individuals get health information?
- Why are certain behaviors classified as illness or deviance?
- What factors influence individual health behaviors?
- Why do health disparities exist among social groups?
- What roles do the health professions play in shaping behaviors?

HON 251-004: Modern Material Culture and the Archaeology of Us

Dr. Zada Komara | MWF 11:00-11:50

Material culture—the human-crafted physical component of everyday social life—is all around us. The giant buildings that loom on campus, the foods you eat, and your hairstyle are all entangled in the constitution of your social worlds. You use material things to negotiate your desires and your development of self, but these things are not flat reflections of pre-existing identities or the fabric of our society. We worry in the age of consumer goods that embracing material culture renders us shallow or powerless, but this class probes everyday objects to analyze how they are integral to the fundamental experience of being human. We will probe the technological, social, and ideological meanings caught up in material things, the politics of culture embedded in their use, and the way in which they shape who we are and who we wish to be. We will consider material culture from all over the world,

including Barbie dolls, bumper stickers, the H2 Hummer, vintage clothing, bottled water, anti-homeless park benches, graffiti, tattoos, Tupperware, Coca Cola, and the ruins of atomic testing sites, among many other material forms. Material culture is an excellent entry into exploring gender, race, class, sexuality, age, occupation, and all other facets of human social life. This is a class about “stuff” exploring the stuff of humanity, from the intimate scale to beyond.

- What is material culture?
- How have we studied “the material” in the social sciences, philosophy, literature, the arts, and other forms of inquiry?
- How is material culture entangled in the active constitution of self and society?
- How has the rise of modern consumer goods changed the way we negotiate our identities?
- What can we learn from an “archaeology of us?”

HON 251-005: Geopolitics in Kentucky Business

Dr. Nazmus Sakib | TR 12:30-1:45

How do wars, trade disputes, sanctions, and political crises thousands of miles away affect jobs, prices, businesses, and communities in Kentucky? This course explores the connections between geopolitics and everyday economic life, using Kentucky as a window into an increasingly uncertain world.

Students will examine how global disruptions affect major Kentucky industries, including agriculture, automobiles, aerospace, manufacturing, and international supply chains. Cases may include the Russia-Ukraine War, conflicts in the Middle East, U.S.-China competition, and potential crises involving Taiwan and global semiconductor production.

Designed for students from any major, the course combines geopolitics, international trade, security studies, and real-world problem-solving. Through case studies, crisis simulations, country analyses, and team-based activities, students will explore how global events create local challenges and how organizations and communities respond. Students will cultivate problem-solving, teamwork, analytical, and strategic planning skills that are highly sought after by employers to safeguard their businesses from global political shocks in an increasingly volatile world.

HON 251-006: Community Research in Action

Drs. Bryan & Kristina Hains | TR 2:00-3:15

Explore how social science research can make a difference beyond the classroom. In this course, students work alongside community partners to identify real-world challenges, apply research methods, collect and analyze data, and develop meaningful solutions. Students gain hands-on research experience while learning to build collaborative partnerships, value community knowledge, and use research to create positive community impact.

HON 330-001: Positive Organizational Psychology

Dr. Laura Bryan | TR 3:00-4:45

This course is designed to give students theoretical, research, and practical knowledge of the science of positive psychology, a positive view of human functioning, in the workplace. We will examine the scientific study of positive experiences in organizations that result in individual and collective flourishing, also known as positive organizational scholarship or positive organizational behavior. Relying on an interdisciplinary approach, we will

learn how to design positive workplaces that can enable individuals, teams, and organizations to thrive. Topics may include well-being, strengths, gratitude, psychological capital, leadership, emotions, relationships, meaningful work, teams, organizational change, engagement, performance, and others related to positive workplaces. A special feature is the application of positive psychology principles to assess and improve your own flourishing in work.

Upon successful completion of this course, students should be able to:

- Explain theory and research of positive psychology in the workplace;
- Critically analyze and effectively communicate key findings on research topics;
- Examine and compare the applications of positive psychology theory and research to the workplace;
- Determine strategies that will improve their own flourishing as well as change organizational conditions to enhance employees to thrive.

UK CORE: ARTS AND CREATIVITY

DES 100-006: Design in Your World

Dr. Elizabeth Swanson | MWF 12:00-12:50

Understanding how design unfolds from and informs culture, students garner appreciation for and creatively experiment with the embedded practice of design as a basic human response for inhabitation, work, play, and worship.

HON 252-001: Short Form Literature and the Art of Meaning

Dr. Dustin Faulstick | MWF 12:00-12:50

The twentieth century saw major historical, economic, scientific, religious, and political events shape the creation of literature and the arts. Turn-of-the-century scientific discoveries had many people wrestling with meaninglessness, which World War I accelerated. Some artists tried to replace, repair, or revive traditional sources of meaning, while others abandoned the idea of inherent meaning altogether. Our course follows literary responses to the twentieth century by authors born in the United States. It examines the relationships between US authors and other art forms—especially painting and jazz. A creative component of the course invites students to adapt the artistic styles and strategies our course authors advocate to produce their own artworks. The following questions will help to guide our conversations:

- What historical, scientific, and philosophical events informed the development of twentieth-century artistic movements, and how did twentieth-century culture evolve from previous time periods?
- How did place and proximity to other artists—for example, many US writers found inspiration in Paris, France— influence the development of literary styles?
- How did expectations for where we find meaning in the world change as a result of new scientific discoveries, and how have literary authors responded to those changes?
- What can visiting an art museum, listening to a piece of music, or reading about brain cognition contribute to our ability to closely observe, assess, and reflect on art?
- How does creating our own poems—imitating the styles of famous authors—aid in understanding literary complexity and the processes of creation?

HON 252-002 & 003: Moving Images: Intersections of Art, Experimental Film, and Home Movies

Dr. Jena Seiler | MWF 12:00-12:50, 1:00-1:50

This course creatively and conceptually explores moving image practices and the relationship between art, experimental film, and home movies. Specifically, the course will focus on home movies' creative and experimental potential. Throughout the course, students will be asked to respond to moving image works, engage with concepts, explore their own relationship to the medium and topic, and create their own moving image projects. These projects will require students to rework existing footage and create original footage. To support students in their creative endeavors, the class introduces students to various works by artists and filmmakers and techniques for filming and editing their own works.

HON 252-004: Graphic Narratives and the Art of Storytelling

Dr. Julie Boutwell-Peterson | TR 12:30-1:45

In the past few decades, graphic narratives have exploded on the literary scene—proving how the medium is not only useful for kids’ comic books but also for exploring a plethora of serious issues, especially historical trauma and personal narratives.

This class will explore a variety of comic forms and genres—including memoir, biography, and symbolic fantasy. We will learn the elements that make up graphic narratives—panels, frames, gutters, page layouts, word balloons, and sound effects – and consider how each element contributes to the meaning and effect of the story. We will also consider how best to “read” this genre – even, or perhaps especially, pages that have no words.

Along the way, we will discover how readers can find healing and gain powerful new perspectives to both historical and personal events in this remarkably compelling literary genre.

In addition to text analysis, class time will be devoted to practicing the art of the comic, and at the end of the semester, you will create your own complete graphic narrative. No drawing skills are needed—only a willingness to try something new and expand your creative horizon!

HON 252-005: Peacebuilding and the Arts

Dr. Tara Tuttle | TR 11:00-12:15

Building peace in our communities requires creative thinking. In this course, we will examine a variety of social conflicts, both past and present, from different regions of the globe, and the creative, artistic strategies of response. Course readings and films will ask us to explore varying understandings of justice, peace, and conflict transformation and the roles of creativity in those endeavors. We will consider how social movements are catalyzed, how leaders cultivate solidarity, how peacebuilders deploy creativity, how artists respond, and how groups confront and leverage power as they address issues of justice, peace, human rights, and conflict transformation. Students in the course will select some of the artistic approaches to conflict and justice we will investigate in the second half of the course as we search for patterns among social movements with outcomes that further peace. We will consider the following questions: How is peace defined and by whom? How have groups and individuals employed creative strategies to combat injustice? What kinds of practices create enduring peace? What is the role of writers, artists, and other creators in conflict transformation and peacebuilding? What patterns do we detect among peacebuilding, conflict transformation, and justice promotion efforts with successful outcomes?

HON 252-006: Practice of Pop Music

Dr. Michael Baker | MWF 2:00-2:50

An introduction to the principles of music within the context of contemporary commercial music styles. Aural and written skills are developed through listening, singing, transcription, and improvisation exercises. Topics include: rhythm notation, metric frameworks, common drumming patterns, key signatures, scales, melodic patterns, common chords and their inversions, and song form.

UK CORE: US CITIZENSHIP

JOU 101-002: Introduction to Journalism

Dr. Jen Smith | MWF 1:00-1:50

This course introduces students to the principles and practices of journalism and explores its importance in a democracy. It examines the history and development of news media, the relationship between media and government, and freedom of the press and media ethics. The course provides an overview of the modern media landscape and the economic, technological, and cultural forces shaping the production and consumption of news. Students also get an introduction to foundational journalistic practices, including news judgment, story development, interviewing, reporting, and writing.

JOU 256-002: News Literacy in the Age of AI

Dr. Peter Ben Baniak | TR 2:00-3:15

Artificial intelligence is rapidly changing the way people find, experience, and share news and information. This course prepares students from all majors to navigate today's evolving digital news ecosystem with critical thinking and ethical judgment. Students will examine how journalists and newsrooms use AI, how algorithms and AI shape what people see, and how misinformation and manipulation circulate online, plus what that means for public trust.

HON 360-001 & 002: Media and Civil Society

Dr. Sherelle Angelique Roberts | TR 2:00-3:15

Media and Civil Society examines the impact of newspapers, radio, television, movies, and social media on the American information environment, from the founding of Fox News and the Boston Tea Party to TikTok. This course will examine the importance of facts, narrative storytelling, and a cohesive information environment to the success of America's democracy. We will examine historical and contemporary events through the lens of media across the political and social spectrum. You will learn about themes such as media literacy, social contract theory, media bias, the role of media in social movements, information processing in the brain, misinformation/disinformation, and political satire.

UK CORE: STATISTICAL INFERENCE REASONING

STA 381-002: Engineering Statistics – A Conceptual Approach

Dr. Jieyun Wang | MWF 11:00-11:50

Honors students also enroll in HON 395-003. STA 381-002 meets with STA 381-001.

Data collection, description, and factor "association" versus causal relationship; "Confidence" - statistical versus practical; and Hypothesis testing - All of these covered in a conceptual approach while relying heavily on the mathematical language of probability (e.g., population and sample distributions; sampling; regression on one variable) and use of simulated and real data.

UK CORE: GLOBAL DYNAMICS

HON 350-001: Middle Eastern & South Asian Politics

Dr. Nazmus Sakib | TR 11:00-12:15

Have you ever wondered why the Middle East and South Asia are so frequently in the news? Why do conflicts in these regions have global ripple effects? How do history, politics, and religion shape everyday life in these areas? This course invites you to explore these critical regions by examining their political and social landscapes in depth. The Middle East is one of the most politically complex and conflict-prone regions in the world. Despite being the focus of intense global debate, it remains widely misunderstood. We will examine key issues such as domestic politics, diplomacy, conflicts, religious and civilizational legacies, and economic development. We'll cover major events like the Israeli-Palestinian conflict, the wars in Afghanistan and Iraq, and the Arab uprisings. South Asia, one of the most densely populated regions on the planet, has long been a theater of geopolitical tensions—most notably between India and Pakistan, two nuclear-armed rivals. Additionally, the evolving power struggle between India and China adds new layers to the region's strategic importance. By the end of the course, you will have a deeper understanding of the historical and contemporary forces shaping these regions and their impact on international relations.

HON 350-002: Europe Since 1989

Dr. Ryan Voogt TR | 2:00-3:15

This course helps students discover how understanding a region's conflicts and socio-political issues requires knowledge of its history at the intersection of such global issues as economics, politics, and social movement(s). This course will consider aspects of identity, nation, and statecraft and how those intersect with minoritized and/or marginalized groups (e.g. ethnic, racial, or religious minorities, immigrants, refugees, etc); it will look at the major conflicts of the recent decades—traditional wars, economic tumult, or societal tensions—to teach global awareness and understanding; last, the course will consider societal movements and invite students to question their “home” (e.g. U.S.) places, peoples, cultures, and norms of society. Topics will include the transition from communism in Eastern Europe, the Yugoslav wars and Bosnian genocide, the expansion of the EU, Putin's geopolitics and invasions, energy security, refugees/immigration, islamophobia and racism, as well as those chosen by the students in the course, who will identify places and topics of interest within Europe's last 30 years, and engage in the research and presenting of this material to the class.

PLS 103-003: Plants, Soils, and People: A Global Perspective

Dr. Katsutoshi Mizuta | MWF 1:00-1:50

Food is one of the few things that are essential to life. What people eat is about what they need to be healthy, what they want to eat (personal preference and culture), and what they have available or can afford to eat. Agriculture plays a vital role in human food security. Many experts feel the world is facing a food supply crisis. Knowledge and application of the principles of plant and soil sciences will dramatically affect human food security, now and into the future, both locally and globally. However, future human population growth, urbanization, consumer preferences, human decisions regarding civic duties, and climate change will also impact these issues. Students successfully completing this course will leave with an understanding of the need to sustainably expand the world's food supply, the basic principles of plant and soil science, and their application to this problem, and their own potential role in determining our ability to meet this challenge.

HON 301 ADVANCED SEMINAR

HON 301-001: Health in Appalachia

Dr. Kevin Sarge | TR 12:30-1:45

Everyone is entitled to the right to health and to attain their highest physical and mental wellness. Therefore, health equity is essential for fair and just opportunities for everyone's right to health. This course will engage students to examine what is known about health and wellness in Appalachia, identify factors that influence health equity in this region, and explore creative solutions that could contribute to health and wellness equity in Appalachia. The following are among the many important questions we will explore and deliberate on:

- How is one's happiness (physical and mental well-being) measured?
- What health conditions are disproportionately associated with the Appalachian community?
- What factors contribute to the development of the identified health conditions?
- What is the status of health equity in Appalachia, and what factors and barriers may contribute to differences in Appalachian health equity?
- What are possible relations between economics/business and health inequity in the Appalachian community?
- What are the ethical issues underlying health inequity in the Appalachian community?
- How could health equity be achieved for the Appalachian community?

HON 301-002: Adam, Eve, & AI

Dr. Abigail Firey | TR 3:30-4:45

This course examines the religious, ethical, cultural, and practical contexts to consider the proliferating use of Artificial Intelligence (AI). It offers opportunities to develop both greater familiarity with the technology and frameworks for determining our own use in an academic setting.

A first premise of the course is that many aspects of Western culture, including secular culture, have been profoundly shaped by nearly two thousand years of predominantly Christian thought and education. Therefore, each unit includes relevant biblical, patristic, medieval, or post-medieval religious texts to examine their implications for the larger questions raised by the advent of popular access to AI technology. Readings from other faith traditions (Judaism and Islam) and non-conforming religious perspectives are included sporadically.

A second premise is that popular culture, especially stories enshrined in fantasy and science fiction genres, has also shaped our understanding and the world-view of those developing the technology. We shall investigate those perspectives, as well.

A third premise is that shared, transparent experimentation with the technology brings awareness of its strengths and weaknesses and strategies for handling it well (and avoiding it). It is becoming an essential form of literacy. Each unit of the course is built around a theme fundamental to contemplating the ethical and intellectual issues inherent in the development of current, popular forms of generative AI—primarily Large Language Models and chatbots: the very nature of being human, the nature of language, the question of labor, the power to create dangerous technologies, structures and ideologies of wealth and poverty, and man-made and natural environments. Each participant will choose a theme to explore in greater depth than occurs in class meetings, to produce either a traditional research paper or an equivalent form of presentation in other media (equivalency will be very carefully negotiated before and during production of an alternate form).

HON 301-003: Stigma in Health and Society

Dr. Jessalyn I Vallade | TR 9:30-10:45

Stigma is a pervasive and critical problem with significant effects on individual and societal outcomes, including health, workplace, relational, and economic impacts. Addressing this complex problem requires an understanding of its influence at micro (individual and relational), meso (organizational and community), and macro (public health and policy) levels, as well as consideration of multiple stakeholders, from individuals to communities to policymakers. In this course, students will collaborate in teams and with community partners to investigate and address stigma in a specific area of interest or context using intervention mapping and development.

HON 301-004: Mental Health in High Performance

Dr. Marc Cormier | TR 2:00-3:15

This course examines the psychological dynamics of high-performance settings (e.g., elite athletics, performing arts, and rigorous academic programs) where chronic stress, burnout, and harmful or unsustainable coping strategies are often normalized in pursuit of excellence. Drawing on sport psychology and counseling psychology, this course will analyze how factors such as coaching and leadership culture, institutional climate, and academic expectations shape mental health outcomes.

HON 301-005: Language and the Brain

Dr. Ye Ma | TR 3:30-4:45

This course introduces the ways in which language is acquired, represented, and processed in the human brain from an interdisciplinary perspective, incorporating research from linguistics, cognitive science, psychology, and neuroscience. Throughout the semester, we will explore fundamental questions such as "What is human language?" How is language acquired by children? How are sentences and sounds processed in the brain? And how does language interact with other aspects of cognition, such as perception, memory, conceptual knowledge, and social cognition?

HON 301-006: Bylines and Backstories

Dr. Bailey E Vandiver | MW 9:00-10:15

In this course, we will study long-form pieces of journalism as well as biographical or autobiographical works about journalists. This seminar-style course is well-suited to students who learn through reading and who are interested in writing across multiple genres. Students will better understand principles of journalism and develop their own journalistic process through assignments that include a feature story and personal essay, analytical responses to readings, and class discussions.

SERVICE LEARNING and EXPERIENTIAL LEARNING

HMN 303-001: Contemporary Issues Concerning the Humanities

Dr. Chelsea Brislin | MW 11:00-12:15

This is a team-taught course in the applied Humanities. This year's section will be taught by architect Darren Taylor (College of Design) and archivist Ruth Bryan (UK Libraries). These faculty will be using the Raymond Betts House on East Maxwell Street as a case study to explore the methodologies and practical application of historic preservation, archives, design, public history, and more. HMN 303 is open to students from any major and is uniquely hands-on and high-impact. Students will spend time visiting related archives, walking the neighborhood, and exploring historic buildings to better understand how the humanities can help us navigate and understand our urban landscape here in Lexington. Honors students may count this course as either an Honors Upper-Level course or as Honors Experience, but not both. If you would prefer to count this course as an Honors upper-level seminar, please let your Honors advisor know.

HMN 303-002: City Stories: Empathy at Work in the Lexington-Fayette Urban County Government

Tori Cruz & Dr. Rosie Moosnick | MW 10:00-11:15

In his 2008 book *The Big Sort: Why the Clustering of Like-Minded America Is Tearing Us Apart*, Bill Bishop chronicles the social, political, and cultural divisions that have come to define the contemporary American landscape. During the first eight weeks of this course, works such as Bishop's will provide historical context for understanding the divides that permeate our country and surface on college campuses. The concept of empathy will be defined and critically examined through readings such as Paul Bloom's *Against Empathy: The Case for Rational Compassion*. In the latter eight weeks of the course, students will learn about city government and conduct interviews with city employees. Students will be tasked with asking focused questions such as: What would you want people to know about you? About your job? Students will listen to interviews from the archived collection at the Nunn Center. During these weeks, students will have the opportunity to hear from panels consisting of government workers and community organizers/organizations who influence local government (eg Living Streets Lexington, Black Yarn, KY Tenants, and Fayette Alliance). The semester will culminate in a student-led presentation of their findings to councilmembers and staff.

HON 100-001: Service Learning for Singletary Scholars

Mr. Tony Collela | W 3:00-3:50

This course is designed to introduce first-year Singletary Scholarship recipients to the University's scholarly life and organize and execute community service as a cohort, leveraging each scholar's leadership capabilities as directed through their academic interests and service. Through guest lectures, discussions, and out-of-the-classroom assignments, HON 100 helps first-year Singletary scholars gain an early understanding of opportunities at a research university, increase awareness and use of campus resources, reflect on community issues that they can address using the skills and talents specific to their cohort, and form beneficial relationships with students, faculty, and staff.

HON 390-001: Encountering Immigrant and Refugee Lives

Dr. Julie Boutwell-Peterson | MW 3:00-4:15

When John F. Kennedy wrote *A Nation of Immigrants* in 1958—a book that outlines how U.S. immigrants contribute to the economic, innovative, and technological success of the United States—he could not have known how relevant his book would be 65 years into the future. After all, in today’s political rhetoric, the fear of foreigners has reached a new fervor. But if it is true that the U.S. is a “nation of immigrants” and if most Americans today are descendants of immigrants, how do we make sense of the current tirade against immigrants? Set up as a service-learning course (in which you will meet and spend time with immigrants and refugees living in Lexington), this class will give you a chance not only to think, talk, and write intelligently about the topic of immigration but also to gain new insight into the multicultural world that is the United States.

Through the course of the semester, we will consider these questions:

- How does the U.S. immigration system work?
- Who is allowed in and who is kept out?
- What issues do immigrants and refugees face once they arrive?
- How and why do governments try to control their borders?
- How do the current immigration laws affect individual lives?
- What might be the best way forward for U.S. immigration policy?

We will meet together in class, but we will also reserve some class time for volunteering off campus twice a month.

HON 390-002: Want to Build a Tech Company?

Dr. Adrian Magendzo & Dr. Jim Buss | MW 3:00-4:15

Students in this class develop the entrepreneurial skills and knowledge needed to understand how a technological product (such as software or a program) goes from idea to market. First, students identify market opportunities and needs. Second, UK Innovate provides relevant UK technologies that students can assess to address market needs. Third, students begin selecting technologies that might be best suited to the market. (Students in this class will be selected from a variety of disciplines to create multiple interdisciplinary teams of honors students who possess skillsets for the entire length of the project). There are exciting options to continue this work, including a paid summer cohort internship in which students work with UK technology or research and investigate initial technology-market fit, as well as a course in the Fall to develop a full business plan for the chosen UK technology or research. At the end of the semester (and year-long project), students will present their business plan to a team of individuals from the university and industry.

HON 394-001: Applying Real World Project Management in Service to a Nonprofit

Allyson DeVito | TR 3:30-4:45

Students will participate in organized service-learning projects – funded, developed, and implemented by the students - that meet identified community assets and needs. To equip the students, course content includes lessons on project management, team leadership, -building and -dynamics, and problem-solving. This course will also cover key knowledge of the context – non-profit organizations – which are often considered the most complex organizations as they have to manage a double bottom line, fiscal performance as well as positive social impact. These organizations require exceptional leader intelligence and commitment in addition to a passion to serve those in need. In teams and with the non- profit point of contacts (and with the professor as a guide), the students will have the opportunity to develop and implement a small-scale (\$100 cost limit)

capacity-building solution to better serve a nonprofit's mission. Students will have an opportunity to integrate meaningful community service with reflection and in-class instruction to reinforce ideas of civic and social responsibility while at the same time strengthening our community. The content of this course can be used for any major and career with the aim of deepening student understanding of how their skills and knowledge can apply to service.

HON 394-002: Leading Projects to Improve Organizations

Laura Bryan | TR 3:30-4:45

Students will engage in structured service-learning projects designed to create meaningful improvements within organizations. To prepare for these experiences, the course explores topics such as group dynamics, team leadership, organizational development, and organizational effectiveness. Working in teams, students will learn how to identify organizational needs, develop project proposals, and secure approval from both the instructor and the partnering organization. Teams will then lead their projects through implementation and completion.

Throughout the course, students will apply classroom concepts in real-world settings, using reflection, discussion, and guided instruction to deepen their understanding of how organizations can change and improve. Because the knowledge and skills developed in this course are applicable across disciplines, students from any major can benefit from the experience. The course is designed to enhance students' ability to apply their expertise to solve real-world problems while developing leadership, teamwork, and organizational improvement skills. Course also provides students with 3 credits of experiential learning.

HONORS COURSE SECTIONS IN THE DEPARTMENTS

BIO 303-004: Introduction to Evolution

Dr. Rosana Zenil-Ferguson | TR 9:30-10:45, Lecture

Dr. Madhu Pondiche Srinivasan | W 1:00-2:50, Recitation

This course covers topics in evolution, concentrating on the Darwinian theories of evolution, including descent with modification, natural selection, and evolutionary medicine. We focus on providing quantitative evidence to explain the mechanisms of evolution, such as the genetic sources of variation, adaptation, and how species in our world came to be. We study these concepts not only theoretically in lectures; in recitations, we work together to analyze real data on species that have experienced natural selection and common ancestry in the world around us. You will get firsthand experience in the work of evolutionary computer biologists, including how to read computer code, test, and interpret evolutionary evidence.

BIO 315-005: Introduction to Cell Biology

Dr. Alexandra Long | TR 9:30-10:45, Lecture

Dr. Douglas Harrison | W 9:00-11:50, Laboratory

This course examines the fundamental organizing principles of eukaryotic cells, emphasizing how cellular organelles and compartmentalization give rise to the complex, dynamic functions of animal cells. Through in-class case studies, we connect discoveries in cell biology to the mechanisms of disease, illustrating how research into these disruptions has provided critical insights into the functioning of healthy cells. The course culminates in a final poster project where students delve into the scientific literature to explore unusual cell types and behaviors and/or cellular dysfunction in disease.

By the end of this course students will:

- 1) Gain an understanding of the components, regulation, and function of individual cells and how they interact to form complex tissues
- 2) Become familiar with the variety of methods used to study cell biology
- 3) Deepen their critical thinking skills about the logic of experiments to dissect cell biological processes in both normal and disease contexts
- 4) Be able to communicate their understanding of cell biology to others and translate their knowledge of fundamental cell biology of healthy animal cells to disease contexts and less-studied cell types.

BIO 325-004: Ecology

Dr. David McLetchie | TR 12:30-1:45, Lecture

Dr. Key Shenoy | W 1:30-4:20, Laboratory

This course introduces the scientific study of the relationship between organisms and their environment. The course is structured around levels of organization from physiological ecology to individuals, populations, communities, ecosystems, landscapes, regions, and the biosphere. Students will be expected to develop a solid knowledge base and understanding of key concepts and issues in contemporary ecology; to become familiar with how researchers attain ecological understanding; and to see how ecological knowledge and methods can be used to address important societal problems. Lecture, three hours/week; laboratory, an average of three hours/week. As part of the honors enrichment, you will participate in more in-depth discussions on key concepts in ecology. In addition, you will participate in an investigation of the symbiotic relationship between fungi and plants.

BIO 385-003: CURE in Biology: Exploring environmental DNA (eDNA) using DNA sequencing

Dr. Emily Croteau | T 2:00-4:50

This course aims to expose students to current methods, technologies, and protocols used in research labs, specifically in the area of DNA sequencing. Students will gain a comprehensive understanding of the scientific method and hypothesis testing through active experimentation. Emphasis will be placed on enhancing teamwork skills, promoting collaboration within research groups. Additionally, the course seeks to improve essential professional skills necessary for success in STEM fields, including effective communication and presentation abilities. By providing hands-on experiences in inquiry, authentic problem-solving, and exposure to a rigorous research community, students will cultivate a deeper enthusiasm for STEM disciplines. Upon successful completion of the course, students will be equipped to work safely in a STEM research laboratory, analyze biological information and experimental data, apply scientific principles to solve complex problems, and effectively communicate their scientific findings.

CHE 107-003: General Chemistry II

TBD | MWF 1:00-1:50

A continuation of CHE 105. A study of chemistry principles and their application to elements and compounds. Exams are the same in Honors and non-Honors sections of CHE 107, but the Honors section allows students to engage in discussion and projects.

CHE 565-002: Environmental Chemistry

Dr. Marcelo Guzman | MWF 11:00-11:50

A study of the sources, reactions, transport, effects, and fates of chemical species in the atmosphere, hydrosphere, lithosphere, and biosphere.

ECO 201-006 Principles of Economics I: Market Failures, Nonprofits, and Social Impact

Dr. Gail Hoyt | TR 12:30-1:45

This course offers an engaging introduction to how markets function, examining the behavior of consumers and firms, and the impact of supply and demand on prices. You'll delve into pressing issues like environmental damage, poverty, income inequality, and monopoly power, while also exploring the role of government in addressing these market failures. Through group projects with local nonprofits, you'll apply economic theory to real-world challenges and see firsthand how economics can drive positive change. Our discussions will be enriched by diverse resources—news articles, podcasts, and guest speakers—that bring current economic issues to life. By the end of the course, you'll have the tools to analyze economic decisions, understand the broader impact of policies, and explore the powerful connection between economics, policy, and nonprofit work. Coursework includes three exams, homework, short writing assignments based on lectures and readings, daily activity credit for in-class work, and a group community partnership project.

ISC 325-001: Strategic Audience Insights

Dr. Kimberly Parker | MW 10:30-11:45

All around us, brands are vying for attention. So why do some messages hit home while others miss their mark? What makes an ad effective or an influencer influential? How do the brands that make up our world persuade consumers to buy, try, donate or volunteer? This course examines a systematic framework for uncovering and understanding strategic audiences' motivations, influences, and decision-making processes. These insights provide brands with tools to improve strategic planning and campaign outcomes. The course investigates psychological, situational, and socio-cultural factors that both promote and restrict audience decision-making and actions. After unlocking audience insights, students will turn their insights into action by creating integrated strategic communications deliverables.

MA 322-008 Matrix Algebra

MWF 10:00-10:50

Algebra of matrices, elementary theory of vector spaces and inner product spaces, and the solution of simultaneous linear equations using Gaussian elimination and triangular factorization. Orthogonal projections, pseudo-inverse, singular value decomposition, and least squares approximation. Determinants, eigenvalues, and eigenvectors, diagonalization.

ME/AER 220-004: Engineering Thermodynamics I

Dr. Farzad Taghaddosi | MWF 9:00-9:50

This first course in engineering thermodynamics is intended to introduce students to the fundamental concepts of energy balance and efficiency, with an emphasis on both theoretical and practical aspects. The objective is to apply these principles to analyze various thermodynamic systems.

PGY 412G-002: Honors Principles of Human Physiology

Multiple Instructors | MW 1:00-2:50

Honors Principles of Human Physiology is a 4-credit course designed for students pursuing degrees in health sciences, preparing for professional programs in healthcare-related fields, and others interested in an in-depth study of human physiology. The objectives of this course are for students to develop a fundamental understanding of physiological principles, fundamental mechanisms of human body function, and the physiological integration of organ systems that work cooperatively to maintain homeostasis. Following an introduction to physiological principles and cellular physiological processes, students will learn the structural and functional elements of each organ system and how they mechanistically contribute to the regulation of physiological functions including, but not limited to the maintenance of blood pressure, ion and fluid balance, motion and movement, sensory perception, energy balance, and reproduction. With this knowledge students will be challenged to form a general understanding of how the body functions in healthy and diseased states. The course employs a flipped classroom model in which students are assigned lectures with accompanied readings prior to class time. During in-person class time, students will engage in critical thinking exercises that include quizzes, group discussions, problem sets, and case studies.

TEK 100-202: Collaborative Intelligence: Understanding and Using Modern AI

Dr. James Herman Brusuelas | Asynchronous Part-of-Term

This one-credit-hour course equips first-year students with the critical, creative, and ethical competencies to thrive in a world shaped by artificial intelligence. Through a series of hands-on weekly labs using no-code AI tools, students will learn to collaborate with AI as a partner, critically evaluate its outputs, and understand its societal impact. The course culminates in a proposal for an ethical AI application to solve a problem in a community they care about.