Basketballogy

Instructor(s): Michael Romney <u>mjr91@duke.edu</u> and Connor Flannery <u>cef44@duke.edu</u> Faculty Sponsor: Daniel Scolnic, Associate Professor of Physics <u>daniel.scolnic@duke.edu</u>

Course Description

Just about any Duke Basketball fan knows to cheer for a highlight Cooper Flagg dunk or a clutch Ashlon Jackson three-point shot, but knowing how the player got open to score, for example, takes a more keen and practiced eye. For Cameron Crazies who are interested in building upon their basketball knowledge, with a focus on tactics and analytics, this course offers the opportunity to learn to watch basketball like a professional. Our deep dive into the strategies that create Duke's success on the basketball court is a unique opportunity for students who find themselves camping in K-ville every January or watching away games on ACC Network instead of studying for midterms to expand their understanding of the intricacies of the game. Seniors Connor Flannery and Michael Romney, who have spent years working in basketball operations positions for the Duke Men's and Women's Basketball programs, will share what they have learned from some of the game's brightest minds and biggest talents.

Bull City Scholars DPS Middle School Outreach

Instructors: Bianca Ingram <u>bci3@duke.edu</u> Casey Powell <u>cip65@duke.edu</u> Faculty Advisor: Dr. Victoria Lodewick, Director, University Scholars Program, affiliated with Program in Education <u>val1@duke.edu</u>

Course Description

What constitutes a "good education" and who gets access? Why does it matter? How has public education in the city of Durham evolved over time and how has it impacted the community? Middle school is a particularly crucial time that is often overlooked. What makes this stage of education particularly fraught... or exciting? There is nothing more critical to college students than understanding how children in our own community learn and the challenges they face, which impacts the trajectory of the rest of their lives, from whether or not they go to college to the kinds of jobs they get and how much they can earn. This course follows the model of Community-Engaged Learning and "offer[s] enriching aspects of working in the community and opportunity for critical reflection on ethical service experiences." It will prepare undergraduates who are interested in tutoring and mentoring at Neal Middle School with the Bull City Scholars organization, or other outreach opportunities with Durham Public Schools. By engaging with readings, class discussions, guest speakers, and films, students will begin to understand the history of public education in the city of Durham, the demographic and infrastructural shifts that have impacted the community over the past 20 years, and the particular challenges to college access that students from socioeconomically disadvantaged backgrounds face.

Deconstructing the History of the American West

Instructors: Jerry Zou <u>zz341@duke.edu</u> Faculty Sponsor: Dr. Juliana Barr <u>juliana.barr@duke.edu</u>

Course Description

In U.S. media and education past and present, the American West has been a symbol of romanticization and individualism. This skewed representation in film, literature, news, and popular culture shadows the American West as a network of complex and multi-lateral interaction among racial, political, economic, industrial, environmental, colonial, urban, and scientific factors. Where was — or is — the West? How much did the Louisiana Purchase actually cost? What was the real motivation when the U.S. and Mexican governments mentioned Native American communities in the Treaty of Guadalupe-Hidalgo? What industries hide behind the theater stages of California's Hollywood? This course reexamines the ways well-known narratives have been taught and told in classrooms and media to peel back the sugarcoats that have engulfed the intricate past of the American West that still affects our communities today.

Disability Narratives: Justice and Activism

Instructors: Jaden Sacks <u>iss162@duke.edu</u>; Miranda Harris <u>mth46@duke.edu</u> Faculty Sponsor: Dr. Jehanne Gheit <u>gheith@duke.edu</u>

Course Description

This course aims to focus on disability studies through the narratives of individuals with disabilities. Students will gain a deeper understanding of the nuances of disability justice, activism, and allyship through analyzing and discussing various writings, art pieces, performances, and films throughout the semester. This course is especially critical at Duke University, where the disability field is not supported by an academic department and no formal academic track is offered to students interested in this field. Students are encouraged to challenge the various cultural understandings of bodily differences and how they manifest in popular media and common stigmas surrounding disability. In an ableist society where individuals are often pathologized, we also plan to study how these social, cultural, and political structures create day-to-day struggles in the disabled lived experience. Throughout this course, we will read, discuss, and learn from disability narrative stories. The course will explore the following: ableism and the power of language, history of disability justice, accessibility, intersectionality, representation in media, and global perspectives. This course will primarily consist of interactive lectures, group discussion, guest speakers, and more. We hope that this course serves as a gateway for students to become more involved or continue their involvement in disability activism efforts on campus and to explore other forms of scholarship on campus.

Don't Say a Word: Nonverbal and Nonlexical Language Forms-LangDorm

Instructor: Claire Cullen T'27 <u>ckc34@duke.edu</u> Faculty Sponsor: Luciana Fellin, Department of Romance Studies <u>fellin@duke.edu</u>

Course Description

This course will explore the forms of language that are nonlexical and/or nonverbal: meaning, forms of communication outside of the spoken word. We will learn about different forms of nonverbal language, from those that are societally regarded as language because they use words (but are not spoken, changing their modality), such as standard writing forms or text-based social media, to those that are less commonly viewed as language, such as smoke signals or dance. We will also explore the suprasegmental components of verbal language, such as the pitch and intonation of a person's speech or the gestures that accompany their verbalization. The course integrates a significant amount of discussion around the interconnections of ability/disability and spoken language, and how language that uses different modality such as sign language can increase language accessibility for those who are deaf, hard-of-hearing, nonspeaking and/or otherwise need language accommodations.

Durham Giving Project

Instructor(s): Nayeli Reyes Rivera <u>sulma.reyes.rivera@duke.edu</u>, Caitlin O'Reilly <u>caitlin.oreilly@duke.edu</u> Faculty Sponsor: Sam Miglarese, Adjunct Instructor in the Program in Education <u>sam.miglarese@duke.edu</u>

Course Description

Durham Giving Project is a course that exposes students to various issues in Durham and pushes them to think of different philanthropic methods for serving nonprofits in this city and beyond. Classes will begin with a unit on the history of Durham, then alternate between units on discussing key societal issues and understanding the role of nonprofits and fundraising. Students will explore the actions different local nonprofits are taking in housing, healthcare, education, and food insecurity, and will be challenged to reflect on the nature of Duke's responsibility to Durham in these different contexts.

Experiential Education & Outdoor Leadership Instructor: Max Freudenheim <u>max.freudenheim@duke.edu</u> Faculty Sponsor: Nicolette Cagle <u>nicolette.cagle@duke.edu</u>

Course Description

This course aims to introduce principles of outdoor leadership largely through the realms of experiential education, seminar-style discussions, and personal reflection. While aiming to keep the lessons applicable to varied situations in the outdoors, or even in the 'paved world,' the lessons will use group backpacking expeditions as a framework for learning. The class is framed by current issues with accessibility of the outdoors but also with its historical context as well. Students are encouraged to engage in their local outdoor spaces as well as planning their own small group weekend trip to gain real experiences with organization and leadership in the outdoors. In class, students will discuss topics including risk and emergency management, history of race, sex, and gender in the outdoors, non-directive leadership, consensus, and environmental stewardship and justice. They will hone skills that will aid in navigating risk-taking, interpersonal relationships, and group dynamics.

Foundations of Research

Instructors: Madiha Khan <u>madiha.khan@duke.edu</u> Victoria Ayodele <u>victoria.ayodele@duke.edu</u> Ashi Jai <u>ashi.jain@duke.edu</u>

Faculty Sponsor: Bernard Fischer, Pediatrics <a href="mailto:bernard-security-bernard-securit

Course Description

This class is designed to expose students to the academic side of research as they learn how to synthesize results, present them, and explore related topics. Students will analyze and discuss published research articles, engage in conversations with professors about different aspects of research, and design and present their own research. These professional development seminars are designed to complement the students' work in their research labs. The course is designed for first and second year undergraduates who are members of the Research Scholars Program (RSPr). In this program, each student will be matched with a faculty mentor, but other students who have recently entered a lab may also enroll in the course. All Duke undergraduate students are eligible to participate in The Research Scholars Program. The limit of the class size is set by the Registrar.

History of the American Presidency

Instructor: Matthew Song <u>matthew.song@duke.edu</u> and Timothy Gunawan <u>timothy.gunawan@duke.edu</u> Faculty Sponsor: Michael Gillespie <u>mgillesp@duke.edu</u>

Course Description

The President of the United States has often been described, amongst other things, as 'the most powerful person in the world' and the 'leader of the free world.' We associate the Presidency with extraordinary power, guiding US domestic and foreign policy, through its control of powerful federal agencies and departments, its influence over legislative affairs in Congress, and its ability to issue sometimes sweeping executive orders. But the current shape of the Presidency, and the powers we associate with its contemporary form, was not inevitable; it was shaped over the course of American history by events, everyday and exigent, and by the personalities and characters of those who have held the office. This course will examine the American Presidency, its historical and its contemporary functions, and how it developed and shaped political needs, through war, electoral necessities, civil conflict, economic dysfunction, and everyday politics into the institution we know today.

How to Save a Life: An Introduction to Emergency Medicine

Instructors: Amy Fulton, <u>amy.fulton@duke.edu</u> Sofia DiFulvio, <u>sofia.difulvio@duke.edu</u> Faculty Sponsor: Dr. Patrick Charbonneau, <u>patrick.charbonneau@duke.edu</u>

Course Description

A house course dedicated to developing an in-depth understanding of the management of medical emergencies. Taught by members of Duke University EMS, students will gain an introduction to emergency medicine with applications to real world situations, particularly within the Duke and Durham community. Covered topics include how to react if someone goes into cardiac arrest, how to help choking victims, how to care for burns, how to bandage wounds, how to splint injuries, and much more. Beyond that, the course will delve into modern advancements in emergency medicine, as well as many of the issues which medics and emergency department physicians still face today. No prior medical experience is necessary, but the course aims to provide valuable medical knowledge. Skills will be taught, but a large emphasis will be placed on the importance of emergency interventions and how improvements can/have been made to emergency medical systems. Students will also be introduced to more ways they can become involved with emergency medicine in the Duke and Durham community if they choose to pursue them.

Impact Investing

Instructors: Raiyan Choudhury <u>raiyan.choudhury@duke.edu</u> (c) 480-686-7403 and Amalie Seth <u>amalie.seth@duke.edu</u> (c) 917-648-2194 Faculty Sponsor: Ben Thomason (<u>ben.thomason@duke.edu</u>)

Course Description

In a world dominated by a desire for growth, sustainable and empowering impact has become inextricably tied with financial well-being, ranging from proper external investment strategy to appropriate internal allocation policies. To successfully innovate in the contemporary world, there will always be a requirement to understand the fascinating flows of money, the increasingly interconnected webs of wealth, not only to fund ideas but also to establish impact. This course aims to bring attention to Impact Investing, a multifaceted field with roots in corporate social responsibility, social entrepreneurship, development economics, and financial services. We will explore impact investing at the intersection of these usually distinct industries. By the end of this course, we will not only understand why impact investing is widely regarded as the most applicable pathway to social impact at scale, but also have developed the skill set necessary to implement and manage impact investment funds.

Introduction to Applied Quantum Computing

Instructor: Shelby Hartman <u>shelby.hartman@duke.edu</u> Faculty Sponsor: Professor Kenneth R. Brown, ECE, Physics & Chemistry <u>kenneth.r.brown@duke.edu</u>

Course Description

Introduction to basic quantum computing theory and quantum algorithms. The course will start with theories on linear algebra formalism and postulates in quantum mechanics, and then proceed to quantum circuits and algorithms and hardware with an emphasis on hands-on experience using IBM Qiskit platform.

Medicinal Chemistry and Other Chemical Applications

Instructors: Chinelo Agwuegbo, Chemistry <u>cea48@duke.edu</u> and Miguel Cohen Suarez, Chemistry <u>miguel.cohensuarez@duke.edu</u> Faculty Sponsor: Charlie Cox, Chemistry <u>Charlie.cox@duke.edu</u>

Course Description

Chemical interactions can be found everywhere around us, and pharmaceuticals are no exception. Chemistry plays a critical role in many pharmaceutical processes, from the mechanism of action to the research and optimization of modern pharmaceuticals. This course aims to elucidate the mechanisms of these drugs from a basic scientific viewpoint and review the history of the many seminal developments that have occurred in medicinal chemistry. No prior chemistry or biochemistry knowledge is necessary. Emphasis will be placed on developing insight into the creative applications of simple principles to achieve desired goals. This course will support students in developing an understanding and appreciation for chemistry in medicine.

Pink Floyd and the Concept Album

Instructor: Seth Kessler <u>seth.kessler@duke.edu</u> 305-968-7973 Faculty Sponsor: Dr. Philip Rupprecht, Department of Music <u>philipr@duke.edu</u>

Course Description

The legendary rock band Pink Floyd champions the intersection of music and storytelling. Their discography features many timeless concept albums that each present a unique and emotionally sophisticated reflection on the human experience. *Pink Floyd* and the Concept Album is an exploration of five influential records of the band's "Golden Age": *The Dark Side of the Moon, Wish You Were Here, Animals, The Wall,* and *The Final Cut.* In this course, we will analyze these records to extract our own meaning, and we will develop a greater appreciation for concept albums outside of this course.

Poetry and Death

Instructors: Tyler King <u>tk214@duke.edu</u>, Arielle Stern <u>azs3@duke.edu</u> and Trisha Santanam <u>tms104@duke.edu</u>

Faculty Sponsor: Joseph Donahue, Professor of the Practice of English Department of English <u>idonahue@duke.edu</u>

Course Description

Why are so many poems about death? What does this tell us about both the poetic form and about death itself? Poetry has long been used to make sense of death, whether mourners are elegizing their lost loved ones or poets are reflecting on their own immanent deaths. Poetry is both personal and universal, it both deals with the temporal and grasps at the intangible (the unknown), so it has naturally lent itself to reflection on the greatest unknown—the unknown of *death*—across geographic boundaries and historical periods. This course is a survey of how death has been taken up in poetry, ranging from ancient Greek funeral epitaph to 20th and 21st century secular poetry concerned with matters of how to die a modern death (and much in between). We will deal with different styles and concepts through both critical and creative lenses—we will read poetry, read *about* poetry, and write poetry of our own. We will be asking questions about death as transcendence/ecstasis, what it means to die a collective death in the post-colonial context, what role poetry plays after mass atrocity in the post-war period, how poets are grappling with their own deaths throughout time, and how grief and loss can find meaning in poetry.

The Political Philosophy of Star Wars

Instructors: Jesse Conen <u>idc122@duke.edu</u> 610-680-5243 and Andrew Dawson <u>akd44@duke.edu</u> 832-547-8666 Faculty Sponsor: Jesse S. Summers, Department of Philosophy jesse.summers@duke.edu

Course Description

The highest-grossing media franchise to begin on film, Star Wars has captivated audiences worldwide since 1977 thanks to its groundbreakingly immersive sci-fi world, iconically heroic and evil characters, and - perhaps to a lesser extent - its masterful commentary on real-world political philosophy. While many fans do not flock to the box office to consume political and philosophical content from Star Wars (in fact, many hated the prequel films for leaning heavily into politics), the films provide an astute perspective and, in many ways, parallel events that transpire in our own galaxy far, far away. In this class, we will critically analyze different forms of Star Wars media to elicit insightful discussion on a variety of political and philosophical topics, including but not limited to populism, pacifism, authoritarianism, utilitarianism, traditional and asymmetric warfare, idealism, moral rights, rebellion, and corporatism. Students looking to improve their argumentation, film analysis, writing, and critical engagement skills - while enjoying one of, if not the greatest science fiction franchise ever - will excel in this class.

Regenerating Our Food Systems: the Duke Campus Farm House Course

Instructors: Gurnoor Majhail (they/them) <u>gkm11@duke.edu</u>, Olivia Ares (she/her) <u>ora4@duke.edu</u>, Natalie Lewis (she/her) <u>natalie.v.lewis@duke.edu</u> Faculty Sponsor: Saskia Cornes (DCF Director/Franklin Humanities Institute) <u>sc386@duke.edu</u>

Course Description

Have you ever eaten food? This course aims to provide an overview of sustainable food systems and farming using initiatives at the Duke Campus Farm as a starting point, to ground our approach theory in a particular context and place. Students will explore crucial questions about food systems, equity, agroecology, and justice through critical analysis of assigned texts, interactions with guest speakers, and experiential learning on the farm. The course places an emphasis on how the North Carolina Piedmont fits into the American South in the context of climate change and community resilience. This course is open and welcome to any level of experience (or no experience!) with food systems work. No affiliation with the Duke Campus Farm is required.

The Gratitude Equation: Adding Joy to Life at Duke

Instructors: Danica Bajaj <u>danica.bajaj@duke.edu</u> Faculty Sponsor: Sheryl Welte, Writing Department <u>sheryl.emch@duke.edu</u>

Course Description

Gratitude isn't just a fleeting "thank you"; it's a life-changing mindset. In this course, we'll embark on an exploration of gratitude's scientific foundations and its practical applications in your daily life. Through hands-on activities, insightful readings/discussions, and the completion of Duke bucket-list items, you'll develop the tools to cultivate gratitude, leading to increased well-being and personal growth here at Duke.

Transforming the US Healthcare System

Instructors: Julian Diaz-Ayala Class of 2026 <u>julian.diaz-ayala@duke.edu</u> and Amanda Li Class of 2027 <u>amanda.li@duke.edu</u>

Faculty Sponsor: Dr. Ralph Snyderman, <u>ralph.snyderman@duke.edu</u>, James B. Duke Professor of Medicine, Chancellor Emeritus of Duke University, Director of the Center for Personalized Health Care at Duke University

Course Description

The US healthcare system is the most expensive in the world, yet lags behind those of other highincome countries on benchmarks of quality and access. Increasingly, American healthcare systems and governments are moving towards more personalized, preventive, and predictive delivery models while looking for solutions to address the rising cost of care. Factors like technology, biomedical innovation, and payment reform are shaping major paradigm shifts in healthcare delivery today. This course will be a broad survey of some of the most pressing and relevant movements happening in healthcare delivery reform. We begin the semester with an overview of the US healthcare system and then delve deeply into issues like chronic disease burden, the intersection of Big Pharma and medicine in its relation to drug development and pricing, and misaligned financial incentives for providers and payers. At the end of the semester, we will analyze the healthcare industry through a policy lens, mapping out the political landscape of healthcare and understanding how ideas become legal realities. Through class discussions, many guest speakers, blog posts, and presentations, we hope to make the course highly engaging and thought-provoking. Ultimately, the goal is for this course to act as a springboard for students to explore personal interests in health care that may help to inform future research or academic endeavors.

Urban Studies 101: Breaking the Duke Bubble

Instructors: Tate Kahalas (he/him) Pratt '26 <u>tate.kahalas@duke.edu</u>; Philip Sophocleous (he/him) Trinity '27 philip.sophocleous@duke.edu

Faculty Sponsor: Dr. Edward Balleisen eballeis@duke.edu Vice Provost for Interdisciplinary Studies, Professor of History, and Professor in the Sanford School of Public Policy

Course Description

This course engages with urban studies in two distinct contexts: academic and creative. The former exposes students to the variety of subject areas that constitute urban studies, and encourages them to consider their role in an urban world. This is subsequently used to introduce students to the latter, asking (and attempting to answer!) the question: How can we design and build spaces that are fundamentally good for our health and well-being, economy, safety, and social structure? Course readings introduce students to the multiple subject areas that make up the field of urban studies, namely urban humanities (sociology, cultural anthropology, history, etc.), economics, policy, science, design and engineering, arts, and ethics. Urban design, innovation, and planning principles are embedded within these readings to present the practical, optimistic vision of creating high-quality urban environments. Each class is intentionally designed to expose you to a diverse array of global cities, and engage with interdisciplinary themes that are complementary to existing academic programs at Duke.

Venture Launchpad: From Idea to Impact

Instructor(s): Nathan Shenkerman (nathan.shenkerman@duke.edu) Faculty Sponsor: Dr. Aaron Dinin (<u>aaron.dinin@duke.edu)</u>

Course Description

This course focuses on equipping students with knowledge of the entrepreneurial process and providing them with the necessary resources and support to develop their own idea into a viable venture. During the first half of the course, students will gain a general understanding of topics within initial ideation, product design, founding a company, and startup funding/venture capital. They will gain technical skills through guest speaker lectures and technical workshops on topics such as AI/ML, 3D modeling/computer-aided design, and Figma prototyping. In the second half,

students will apply what they've learned to develop an idea/venture of their own, from identifying a problem space to building and testing innovative solutions in a collaborative environment.

This is just a sample of the House Courses offered Please check Duke Hub for all House Courses approved for Spring 2025