

**TUFTS UNIVERSITY
EXPERIMENTAL COLLEGE**

FALL 2018 COURSES

ExCollege Signature Courses: Taught by Visiting Lecturers

EXP-0001-F Baseball Analytics: The Sabermetrics Model

*3 semester hours, Letter-graded
Thursdays, 6:30 – 9:00 pm*

This course will teach the fundamentals of the emerging science of Sabermetrics, the objective analysis of baseball. In addition, and where appropriate, we will explore the science of baseball scouting.

Students will discuss baseball not through conventional wisdom and consensus, but by searching for knowledge concerning the game of baseball. Hitting, pitching, fielding performance, along with other areas of Sabermetrics, will be analyzed and better understood with current and historical baseball data. Students will design and implement their own Sabermetric research study, learning the important concepts in statistical analysis needed to perform this research.

Andy Andres (N'99) developed and taught the highly successful MOOC "Sabermetrics 101: An Introduction to Baseball Analytics" to about 50,000 registered learners on the edX platform during its two runs in 2014 and 2015. In 2016 he was invited by Google to give a talk about [Sabermetrics and Technology](#). He also explores the topic in his TEDx talk: [The Science of the Home Run](#). Andy holds a PhD from Tufts and an MS from Harvard, and currently teaches Biology and Mathematics at Boston University.

EXP-0002-F Planting Seeds of Curiosity and Justice: School Gardens in our Public Schools

*3 semester hours, Letter-graded
Mondays, 6:00-8:30pm*

This course is cross-listed with Child Study and Human Development as CSHD-0143-09.

Can gardens be a resource for public schools to deepen learning, enhance community and support the health of their students? This hands-on course will dig into the multi-faceted potential of school gardens to address key goals of our public schools. Using school gardens as a model, we will explore the benefits of outdoor education for students, mind, body and spirit. We will also look at the potential for school gardens to be a focal point for food and environmental justice, deep community building, and revolutionary educational models. In partnership with a local nonprofit, students will actively engage with school gardens in Somerville in a service learning capacity, giving back to the community as they learn. Readings and discussion will be paired with workshops in gardening and hands-on teaching methods. Students will complete weekly fieldwork at a local school, as well as a group project addressing an identified need at their school setting.

Jessica Bloomer is Deputy Director and Farm Manager at [Groundwork Somerville](#), a nonprofit working to build social and environmental justice in our city through the levers of youth empowerment, food access, and green spaces, with a major focus on supporting Somerville's school gardens. She has worked in school gardens and environmental education spaces for nearly two decades, both as a teacher and a teaching coach. She holds a Permaculture Certificate, as well as a degree in International Development Studies from Brown University.

EXP-0003-F Queer Space: Explorations in Art and Architecture

3 semester hours, Letter-graded

Tuesdays, 6:30-9:00pm

This course is cross-listed with Women's, Gender, and Sexuality Studies as WGSS-0085-05. This course counts toward the Architectural Studies major or minor as an elective in the Architectural and Art History category; it does not count as an upper-level course.

What is "queer space"? How have works of art and architecture shaped queer understandings and experiences of space?

This seminar will consider these questions across queer history and theory from the disciplinary vantage points of art, architecture, and visual culture. We will examine how a range of artists, architects, curators, critics, and other cultural practitioners have developed aesthetic and political strategies to engage with their spatial and built environments. Beyond ruminating on queer spatial aesthetics and form, we will navigate spaces of queer world-making (e.g. bathhouses, nightclubs, cruising grounds, alternative art venues, domestic settings, archives, memorials, the Internet), as well as spaces of queer appropriation (e.g. museums, campuses, streets, cityscapes, environments, borderlines). We will also explore the queer dimensions of space in relation to spatialized concepts of diaspora, (de)-colonization, globalization, gentrification, and climate change. In addition to writing a final research paper, students will have the opportunity to create an artwork or exhibition proposal.

Jackson Davidow is a PhD candidate in the History, Theory, and Criticism of Art and Architecture at MIT. He is currently at work on a dissertation called *Viral Visions: Art, Epidemiology, and Spatial Practices in the Global AIDS Pandemic*, the first transnational history of artistic and activist responses to HIV/AIDS.

EXP-0004-F Global Health: A Practitioner's Approach to Real-World Problems

3 semester hours, Letter-graded

Tuesdays, 6:00 – 8:30 pm

What does it mean to work on global health? Many students are committed to the delivery of global health, but few are exposed to the core elements of programs development, funding, implementation, and assessment. Our course is a practical primer in each of these areas. Using fundamental texts, our own experiences, a case-based approach, concrete exercises to develop technical skills, and guest speakers from the field, we will provide skill-building, guidance, and structure. We will honestly reflect on successes and challenges in our work and best-practices and pitfalls in global health practice and give students authentic assignments that we will discuss and critique as we would in a work setting. This course will shed light on the complexity of global health delivery and key skills that can support success for students who envision pursuing work in global health domains or who want to better understand the field from the sideline.

Jennifer Goldsmith serves as Director of Global Health Equity Administration and Planning at Brigham and Women's Hospital. She is responsible for research, finance, human resources, and planning, and participates as a consultant on projects in Haiti, Russia, Navajo Nation, and Rwanda. She also serves as a Managing Director of EqualHealth. Ms. Goldsmith has twenty-five years of experience in healthcare planning, including working on strategy, funding and implementation of global health programs. She served as Chief Administrative Officer for Seed Global Health, a public private partnership with the Peace Corps. Ms. Goldsmith holds an MS from the Harvard School of Public Health and an MA in Education from Boston College.

Anatole Manzi is the Director of Clinical Practice and Quality Improvement at [Partners In Health](#) (PIH) with

over fifteen years of clinical and public health experience in resource-limited settings. In his current role, Manzi works with PIH-supported countries to develop and implement safety and quality improvement strategies enhancing the integration of quality management into clinical practice. He has served as a lecturer at the University of Global Health Equity in Rwanda, and has been a member of Rwanda's National Maternal and Child Health and HIV mentorship technical working groups. He is a PhD candidate at the University of Rwanda College of Medicine and Health Sciences, focusing on maternal and child health services in rural Rwanda.

EXP-0005-F Innovation, Entrepreneurship & Startups

*3 semester hours, Letter-graded
Wednesdays, 6:30 – 9:00 pm*

You can't walk down the streets of Boston without hearing the buzz about innovation.

But what is an innovation ecosystem? And how does an entrepreneurial cluster actually get built? In this course, students will study public and private mechanisms for promoting entrepreneurship in urban areas, using Boston's cluster as a case study. It will build upon lessons learned about growing entrepreneurial ecosystems by having students draft a proposal and business plan for a startup.

Sandra Kreis Lacey (F'09) is currently the Director of Labs, North America for John Hancock/Manulife, where she manages the blockchain and artificial intelligence teams. Prior to this role, she served as the Chief Commercial Officer and founding member of Drafted, a mobile app in the hiring space that was backed by \$2.5M in venture funding. Prior to joining Drafted in 2015, she was the Entrepreneur in Residence at Blade, a \$20M startup foundry that focuses on finding the next and greatest consumer-based applications in both hardware and software in Boston. She has also served as the Senior Business Development Manager for the Massachusetts Clean Energy Center, a quasi-public agency charged with supporting the clean energy ecosystem across Massachusetts. She holds an MALD from the Fletcher School at Tufts.

EXP-0006-F Accused: The Gap Between Law and Justice

*3 semester hours, Letter-graded
Thursdays, 6:00 - 8:30pm*

The law is all around us, but what about justice? What is justice? What kind of justice are we entitled to?

Together we will explore the concepts, framework, systems and practices which comprise what justice is, with an emphasis on the perspective of the wrongfully accused. Through the use of drama, film, case studies, media analysis, and other sources, we will consider the factors which shape our personal views of what justice is, decide how much these views really matter, and examine the many factors that determine how systems of justice impact society on various levels.

Sonja Spears (J '86) is the Chief Equity and Inclusion Officer at Boston Health Care for the Homeless, and is a retired elected judge with twelve years of service in the New Orleans judiciary. Despite her unblemished legal career, she endured two years of intense scrutiny as the target of a federal criminal investigation. She was ultimately cleared without any charges being filed, and the office in charge of her prosecution has faced questions of prosecutorial misconduct. She earned her law degree from Tulane Law School.

EXP-0007-F Look Now: Observing Boston Through Art and Science

3 semester hours, Letter-graded
Wednesdays, 6:00-8:30pm

What can the intersection of art and science teach us about world? How can we utilize the power of observation to make us more informed and aware citizens?

This course is based on the practice of observation, one that underpins all of the visual arts, many other disciplines, and, when considered closely, allows us to perceive the world around us in new ways. We will use Boston and its environs as our laboratory, undertaking site-specific field trips to make works based on observation of the landscape, cultural institutions in the area, and the Tufts campus itself. Possible locations we hope to visit include the Museum of Fine Arts, Harvard Natural Science Museum, the BU Observatory, and the Boston Harbor Islands. Students are encouraged to work in many mediums and learn new processes of investigating the world. The course includes readings, studio periods, guest lectures, and a mid-term and final assignment that use the process of observation to create original artworks that deal with contemporary issues related to the environment, architecture and landscape.

Isabel Beavers (SMFA'17) is an Education Fellow at The Institute of Contemporary Art, as well as a Postgraduate Teaching Fellow with the Tufts Institute on the Environment/School of the Museum of Fine Arts (SMFA). Isabel's work visualizes scientific research through immersive installations that utilize a range of media. Her interests lie in the philosophy of science, the intersecting histories of art and science, and how both are implicated in conceptions of nature and current cultural responses to climate change.

Allison Gray (SMFA'17) is a Post-Graduate Teaching Fellow at the SMFA at Tufts, where she has taught Observational Painting. In her most recent body of work, Allison tracks down fruit that has been endangered due to industrial farming practices, and then creates sculptures by preserving the fruit species in resin. Finally, oil paintings of the preserved fruit are completed from observation. Her work utilizes the power of observation to explore ideas about climate change and current environmental issues.

EXP-0008-F American Witches

3 semester hours, Letter-graded
Tuesdays, 6:00 - 8:30pm

When you imagine a witch, is she green and stockinged like the Wicked Witch of the West? Or surprised by her own power like lovable nerd Willow Rosenberg from Buffy the Vampire Slayer? Have you wondered if boredom, vengeance, or rye tainted with hallucinogens motivated the accusers of the 1692 Salem Witch trials?

Using texts from American history, literature, popular culture and law, we will explore the many ways in which witchcraft is depicted and understood in the United States from the 17th century to today. This interdisciplinary course examines how different representations of witches engage issues of sexuality, race, and gender at specific points in American history. Through texts from Maryse Conde's *I, Tituba, Black Witch of Salem* and Arthur Miller's *The Crucible*, to 1964's *Bewitched!* and the 2013 season of popular current television show *American Horror Story*, we will explore how images and ideas of witches shape American culture. Assignments for the course will give students structured opportunities to develop their skills leading discussion, conducting research, and providing constructive feedback.

Christine Payson is a PhD candidate in English and American Literature at Tufts, and has taught college writing courses at Tufts and Framingham State University. She will defend her dissertation, which examines historical fiction set in seventeenth-century Massachusetts, in March 2018. Christine was selected as a Robyn Gittleman Graduate Teaching Fellow in the Experimental College in 2016, and was a Graduate Institute for Teaching (GIFT) Fellow in 2015.

EXP-0009-F Pharmacology and Therapeutics

3 semester hours, Letter-graded

Wednesdays, 6:00 – 8:30 pm

Can you imagine getting a headache without being able to take a pain reliever? Or suffering from depression, breast cancer, pneumonia, or diabetes without medication?

Drugs are often the most effective way to treat disease and alleviate distress. This course introduces students to the study of the use of drugs in the prevention and treatment of disease. We will apply the principles of problem-based learning to real and contrived patient scenarios to explore the relationships between physiology and pharmacology. The course is well suited for students who aspire to pursue a career in the medical sciences.

Frank Massaro is Director of Pharmacy at Tufts Medical Center where he manages clinical programs for the Department of Pharmacy and is responsible for the professional development of the pharmacist staff. He serves on the faculty at the Tufts University School of Medicine and at Northeastern University's Bouvé College of Health Sciences. He received his PhD in Pharmacy from Philadelphia College of Pharmacy and Science.

EXP-0010-F Deconstructing the Ivory Tower: A Critical Perspective on Universities

3 semester hours, Letter-graded

Tuesdays, 6:30 - 9:00 pm

This course counts toward the Education Major as an Elective.

Tufts students are surrounded by higher education every day. Do you ever think about questions like, "Why is a course taught by a lecturer instead of a professor? What's all this talk about tenure? Why does college cost so much? What is on the horizon for undocumented students?"

This course is designed to give students the historical background to understand where issues like these come from and where they are going. We will look at how colleges and universities really work, gaining a foundational understanding of the history of U.S. higher education, while fostering critical discussions about various perspectives and events that are historically and presently relevant. We will also use Tufts and some of its offices/centers as a lens to apply what we have learned to today's higher education landscape. Students will be asked to look again at their campus experiences and think about why colleges are designed the way they are, how they came to be, and whether they should stay that way or change. Students will be asked to look again at the campus on which they live every day, seeing it in a new way.

Jessica Pesce (A'08) is the Associate Dean for Faculty Affairs at the Harvard Graduate School of Education. She previously worked in the Office of the Provost at Boston College for over six years. She earned an MA in Classical Archaeology at Tufts, an EdM at Harvard University, and a PhD in Higher Education at Boston College. She is also an Adjunct Lecturer at Boston University and President of the Alumnae-i Network for Harvard Women.

Kate Drizos Cavell (A'06) is a housing coordinator and academic adviser at Harvard University. She has had a front row seat to many of the toughest issues in higher education today: Title IX, access and diversity, Greek life and its role on campuses, the rising cost of college, and more. She earned her BA in History and Political Science at Tufts and her EdM at Harvard University. She is currently pursuing a PhD in Higher Education at Boston College. She has read the Tufts Daily every day since she graduated from Tufts.

Both women are proud Jumbos.

EXP-0011-F Power, Performance, Protest: Women and the American Political System

3 semester hours, Letter-graded

Thursdays, 6:00 - 8:30pm

This course is cross-listed with Women's, Gender, and Sexuality Studies as WGSS-0085-04.

How do various performances within the American political system use, erase, portray and catalyze women's political action?

In her memoir of the 2016 United States Presidential Election, *What Happened*, Hillary Clinton includes a chapter titled, "On Being a Woman in Politics." She writes, "I put to paper years' worth of frustration about the tightrope that I and other women have had to walk in order to participate" in the American political system. This course examines how we might understand the tightrope of the American political system as a performance series that seeks to elicit particular responses from an audience; it also investigates the impact that leaving women out of these performances has had on our democracy. Further, we will examine how cultural productions – television, film, theatre – frame women in the political system, and how this framing influences the way we understand political institutions.

This interdisciplinary course examines contemporary and historic protest movements, political campaigns, Supreme Court hearings, and public debates as moments of performance. It links these performative acts to performance and political theory, and investigates how they are portrayed in film, television, theatre productions, and the popular press. We begin with the formation of the United States post-Revolution, using the musical *Hamilton* (2015). Other texts/performances include Sojourner Truth's performance of "Ain't I A Woman" (1827), the suffrage movement's history of public lectures (using the 2017 film *Wonder Woman* as a guide), and *A Single Woman* (2004), a play about the first woman elected to Congress, Jeannette Rankin. We will ask how non-violent protests gained black Americans the right to vote, and how the Women's March of 2017 performed resistance. Taking advantage of the 2018 midterm election cycle, students will be required to attend and analyze a campaign event for a female candidate.

Katherine Swim, (A'17) completed her PhD in the Tufts Department of Drama in 2017. Her dissertation examined performances of madness in the broader context of nineteenth-century medical, legal, and legislative discourse. Her other academic interests include performance in relation to religion, science, and politics, as well as musical theatre. She currently works as Manager of Tutoring Programs at the Tufts Academic Resource Center, and has taught courses in Acting, Public Speaking, and Performance Studies. She was a fellow at the Tufts Graduate Institute for Teaching (GIFT) in 2015, and a Robyn Gittleman Graduate Teaching Fellow in 2016, teaching *Mental Illness on Stage and Screen* in the ExCollege.

EXP-0012-F Hip-Hop Dance: The Culture, Philosophy, and Practice of B-Boying/B-Girling/Breakin'

3 semester hours, Letter-graded

Mondays, 6:00 - 8:30pm

This course is cross-listed with Department of Drama and Dance as DNC-0091.

Why did hip-hop dance emerge, and what is its intellectual significance? What are the key elements of hip-hop's aesthetic?

We delve into these questions through readings, videos, and other media. But most importantly, we will learn by physically practicing hip-hop's original dance - bboying/bgirling ("break dancing"). Topics range from the history and unique artistic practices of hip-hop, to controversies within the scene (including the historic introduction of breakin' into the 2018 youth olympics), and centrally to our own senses of personal identity and intelligent movement.

Students will experience this class more as participants in hip-hop dance, than as observers of hip-hop dance. This is the only way to engage genuinely with the principles and practice of hip-hop dance and look empathetically into the significance of hip-hop dance and culture in the lives of the people who practice it.

Taylor Travassos-Lomba is a practicing b-boy (break-dancer) of over 10 years who has garnered recognition at international hip hop events and features on international hip-hop media outlets. He has taught dance at dance studios, nonprofit programs, and at the middle/high school and college levels, as well as organized formal and informal independent hip-hop community outreach events in Rhode Island and Massachusetts. He has a Bachelor's Degree in Economics and Philosophy from Brown University.

EXP-0014-F All the Single Ladies: Women at the Edge of Culture and History

3 semester hours, Letter-graded

Mondays, 6:00-8:30pm

This course is cross-listed with Women's, Gender, and Sexuality Studies as WGSS-0085-03.

Single Americans now outnumber those who are married. How does this growing population impact our ideologies of gender, marriage, sexuality, work, education, lifecycle, and family? Are unmarried women "old maids" or bachelor girls, stodgy or on the vanguard? How has the rhetoric of singleness changed through history? And why does it matter?

In this course, we will study the history of the seemingly "modern" fact of the perpetual bachelorette; single women have been challenging cultural norms for centuries. This course considers the unmarried women at the intersections of class, sexuality, and culture from the early modern era to the present as a way of reflecting on pressing issues of the current moment including equal pay, the glass ceiling, workplace sexual misconduct, fertility, parental leave, and others.

Texts may include Jane Austen, *Emma*; Virginia Nicholson, *Singled Out*; Ann Patchett, *State of Wonder*; William Shakespeare, *The Taming of the Shrew*; Muriel Spark, *The Prime of Miss Jean Brodie*; Rebecca Traister, *All the Single Ladies*; Nathaniel West, *Miss Lonelyhearts*; and Virginia Woolf, *A Room of One's Own*.

Lauren Wilwerding is the Assistant Director of the Lowell Humanities Series at Boston College. She received a PhD in English from Boston College, completing her dissertation on single women and the nineteenth-century novel in December 2017.

EXP-0015-F Podcasting: Crafting Audio Stories

3 semester hours, Letter-graded

Mondays, 6:30-9:00pm

Podcasts and other forms of audio storytelling have exploded in popularity, having assembled, mixed, and adapted the best narrative practices of a century of film, television, fiction, and journalism while, more than the others, elevating the human voice. In this course, students will study and practice the craft of audio storytelling, beginning with an overview of the audio narrative form and basic production standards,

analyzing an array of professional productions, and, solo and in teams, producing audio stories of their own.

Andrew Whitacre is the communications director for MIT's Comparative Media Studies/Writing program and in that position has written, produced, or edited over 200 podcast episodes and has worked with many nationally-known, Boston-based audio storytellers. He holds an MFA in creative writing from Emerson College.

EXP-0017-F One Health: Animal, Human, and Environmental Connections

3 semester hours, Letter-graded

Wednesdays, 6:00-8:30pm

This course has been approved by the Academic Review Board to count toward Natural Sciences distribution credit.

How are doctors, veterinarians, and environmentalists approaching the intersection of human and animal health?

One Health is the integrative effort of multiple disciplines working together locally, nationally, and globally to attain optimal health for people, animals, and the shared environment. Health educators are increasingly reaching across disciplinary and professional lines to prepare a new generation of One Health problem-solvers. This course encourages pre-professional students to value the connectedness of animals, humans and the environment and to think innovatively about solutions to health care problems. The course is organized around four key categories relevant to One Health and includes introductions to:

- Infectious zoonotic diseases (diseases shared between animals and humans) and global health
- Naturally occurring shared disease in companion animals that can serve as models for human disease, advancing both human and companion animal health
- Human-animal interactions which address the strong bonds between humans and animals, and how we can positively impact one another's lives
- Impact of environmental health on human and animal health

We will focus on key questions, challenges, and opportunities in each of these four categories and consider the positive impact of interdisciplinary and interprofessional One Health approaches. This course, coordinated by Dr. Deborah Linder, Co-Associate Director of the Tufts Institute of Human-Animal Interaction, will work collaboratively with members of the Tufts One Health Committee who serve as course lecturers from the Medical, Dental, and Veterinary Schools at Tufts University to blend these categories into a cohesive theme of the ways in which animals, people, and the environment have shared health.

Deborah Linder, as a veterinarian, clinician researcher, CTSI One Health Committee Member, and Co-Director of the Tufts Institute for Human-Animal Interaction, has been educating Tufts University undergraduate and graduate students in One Health principles for the past six years while on faculty at Cummings School of Veterinary Medicine.

EXP-0018-F Investing, Psychology and Human Behavior

3 semester hours, Letter-graded

Thursdays, 4:30-7:00pm

How do investors like billionaire Warren Buffett consistently beat the stock market? How did some investors anticipate the 2008 financial crisis? Can a good financier and investor also be considered a social scientist?

A stock is not just a ticker on a tape or a quote in a newspaper. A stock represents an actual business, and the ability to value the assets of a particular business is crucial to forecasting the direction of its stock price. Companies are managed by people; understanding the role psychology and human behavior play is instrumental when formulating an opinion on a company's share price.

This course will highlight the methodology of successful investors like Warren Buffett, Charlie Munger, Peter Lynch and John Maynard Keynes. Students will learn basic financial metrics and valuation tools to aid their understanding of the investment process. Students will also study behavioral analysis and learn how psychology plays an important role in one's investment success. The goal of this course is to expose students to basic investment tenets and help them develop a foundation that will guide them to become better educated investors in the future. The course will also include the role financial markets have in society. Students will explore how access to financial capital serves as a multiplier effect to human capital, social capital, and real assets, and will explore the ways financial innovation meets the needs of society.

Douglas A. Rachlin (A'85) is a Managing Director, Senior Portfolio Manager and founder of the Rachlin Group within the Neuberger Berman Private Asset Management group. The Rachlin Group manages over four billion dollars in assets. Prior to joining the firm, he served as the president of Rachlin Investment Management, and had previously worked as a securities analyst for Standard & Poor's Corporation. Doug has been quoted or featured in several publications and news media including *The Financial Times*, *The Wall Street Journal*, *Barron's*, *CNBC*, and *Forbes* magazine. He earned a BA from Tufts and an MBA from New York University's Leonard N. Stern School of Business. He is a Trustee of Tufts University.

EXP-0019-F Self-Driving Cars: The Coming Revolution in Transportation

3 semester hours, Letter-graded
Wednesdays, 5:00-7:30pm

Which vision of the self-driving car will win?

Self-driving cars will not only change our modes of transportation but will have wide-reaching implications for our communities and life-styles. The advent will have personal, economic, societal, ethical and regulatory implications, potentially as dramatic as the Industrial Revolution. This course will examine the technologies, human-factors, key players and far-reaching implications of these forthcoming changes.

This interdisciplinary course was first taught in the Fall 2017 semester as a collaboration between two Tufts faculty members.

James Intriligator is a Professor of the Practice in the Mechanical Engineering department at Tufts School of Engineering. His research interests include human factors, design thinking, marketing, perception, and entrepreneurial education. He earned his PhD in cognitive neuroscience from Harvard University in 1997. After a postdoc in neurology at Beth Israel Deaconess Medical Center, he left academia for five years and worked in venture capital and high-tech consulting firms as an offerings designer and innovation catalyst. In 2003, he merged his business experience with his scientific expertise and went to Bangor University in Wales, UK as a pioneer in the field of consumer psychology. At Bangor, he created Europe's leading consumer psychology master's programs and co-developed several multidisciplinary design programs. He co-taught this course in Fall 2017.

Harold Miller-Jacobs is a Lecturer in Industrial and Organizational Psychology and Human Factors in the Tufts Psychology department. As a usability practitioner with over thirty years experience, Hal loves to transmit this knowledge to developers and user interface specialists, helping them to enhance the user experience of their sites, applications or products. He co-taught this course in Fall 2017 and can't wait to have his own self-driving car.

EXP-0021-F From Bees to Beetles: Insect Pollinators and Real-World Science

3 semester hours, Letter-graded

Mondays, 6:00-8:30pm

This course has been approved by the Academic Review Board to count toward Natural Sciences distribution credit.

What does the crisis in bee populations mean for our food system? Animal pollination directly affects the yield and quality of 75% of globally important crops. Recently however, animal pollinator populations—specifically insect pollinators—are declining. What is the current state of our insect pollinators? How do insect pollinators contribute to food security? What factors contribute to the recent population decline? What can we, and the public, do to help?

The course will aim to answer these questions through the study of diverse insect pollinators and nutritional ecology, with students learning how to digest research articles and use basic science to create applied solutions.

Rachael Bonoan earned her PhD in Biology at Tufts in 2018, where she studies nutritional ecology in honey bees and keeps bees both on the Medford/Somerville campus and the Grafton campus. She is pursuing a post-doc at Washington State University and Tufts to study the symbiotic relationship between ants and Puget blue butterflies. She was selected as Robyn Gittleman Graduate Teaching Fellow for the Fall 2017 semester.

Robyn Gittleman Graduate Teaching Fellowship Courses

EXP-0022-F Programming for Everyone: MATLAB and Its Possibilities

3 semester hours, Letter-graded

Thursdays, 6:30-9:00pm

Is programming the right thing for me? How should I start?

As programming skills seem to be a necessity nowadays, more students of different majors, including arts and social sciences, desire to learn to program. In this course, you will be given assessments to learn your strengths in programming, understand how programming skills could be applied to solve problems from your own major, and create your own programming projects. By the end of the course, no one will be afraid of programming languages!

Junyuan Lin is a PhD student in the Math department at Tufts where she has taught math and programming courses, including MATLAB. Her research is in Graph Theory, and her interests include developing preconditioners to solve ill-conditioned Graph Laplacians derived from protein networks, social networks and natural language processing word embeddings.

Junyuan was selected by the Experimental College to be a Robyn Gittleman Graduate Teaching Fellow for Fall 2018.

EXP-0023-F Harvesting Solar Energy

*3 semester hours, Letter-graded
Tuesdays, 6:30-9:00pm*

How exactly does solar power work? What considerations go into the successful use of this technology?

The course focuses on understanding the underlying principles behind concentrated solar power, answering questions like, "How do concentrators work? Are they feasible? What are their limitations?" We will discuss the inner workings and mechanics of the devices attached to these optical concentrators. By the end of the course, students will be exposed to multiple technologies ranging from molten salt parabolic concentrators to multijunction photovoltaic panels and will be able to draw upon a pros and cons list of each technology for a given scenario.

Ahmed Zayan is a fourth year MS/PhD Candidate in the Electrical and Computer Engineering Department at Tufts. His extensive and broad interests in modern day technology has carried him across multiple disciplines in the field of science and engineering starting with a Bachelor's degree in Mechanical Engineering and two Master's in Material Science and Engineering from the Masdar Institute in the UAE, as well as Electrical and Computer Engineering from Tufts. His interests include novel photovoltaic setups, device simulation and solar energy harvesting.

Ahmed was selected by the Experimental College to be a Robyn Gittleman Graduate Teaching Fellow for Fall 2018.

EXP-0024-F Sonic Dimensions: The Culture, Theory, and Politics of Sound

*3 semester hours, Letter-graded
Thursdays, 6:00-8:30pm*

Laurel or Yanni? This amusing viral question suggests a deeper issue: although sounds permeate our world, there are radically different ways of interpreting them. Indeed, how often or how carefully do we analyze sound? How do different cultures and technologies shape the listening experience? What political and ecological work can listening do? How do people use sound to heal and destroy one another? And how could you possibly think it's Yanni?

This course will introduce Sound Studies, a broad interdisciplinary field that deploys a wide range of methodologies to investigate **how** listening is fundamental to human experience but just as varied and complex. We will think closely and creatively about how listening functions on the smallest physical level, and how listening ultimately shapes the foundations of our world. Our course will cover numerous topics, including but not limited to:

- Multicultural interpretations of music, dialogue, dialects, and noise
- Early developments of recording and broadcasting technologies
- Philosophical and psychoanalytical readings of voice and listening
- Sonic characteristics of literature and cinema

We will immerse ourselves in music, films, essays, novels, and philosophy to encounter the resonant connections among bodies, cultures, and technologies, producing our own sonic commentary and art along the way. Artistic and critical voices include but are not limited to: Hurston, Joyce, Woolf, Russolo, Barthes, Bergman, Coppola, Cage, Olson, Stravinsky and many others.

Alexander Ruggeri is a PhD candidate in the English Department at Tufts, where he focuses on Modernist literature, sound studies, and literary theory. His dissertation examines how modernist literature reconceptualizes literary form and subjectivity through scenes of listening. He has taught writing and composition courses at Tufts and Suffolk, as well as a course at Emerson College called "Modernism and Sound."

Alex was selected by the Experimental College to be a Robyn Gittleman Graduate Teaching Fellow for Fall 2018.

EXP-0025-F Performing China on the American Stage and Screen

3 semester hours, Letter-graded

Mondays, 6:00-8:30pm

This course has been approved by the Academic Review Board to count toward Arts distribution credit.

What do representations of China on the American stage and screen tell us about China and about the United States?

In the most recent presidential election campaign, [Donald Trump's repetitive utterance of the word "China" went viral on the Internet](#). In addition to impressions of a world factory and a rising power, what are the images of China and the Chinese that American people are familiar with in the cultural realm? This course examines representations of China and its people in various forms of cultural production in America in light of key historical events in Sino-American relations, labor and immigration, race, gender, and sexuality, as well as global capitalism. We will consider theatre, film, television shows, sport as performance, and more.

Yizhou Huang, is a PhD candidate in the Department of Drama and Dance at Tufts, and is currently working on her dissertation, "Staging Colonial Modernity: Performances for English-Speaking Audiences in Shanghai between the Two World Wars." Her research interests include political theatre, Chinese theatre, and intercultural performance. As an international student from China who came to the United States for graduate studies, she is interested in people, history, and ideas that cross borders. At Tufts, she has worked extensively with underrepresented students about issues of race, gender, and sexuality.

Yizhou was selected by the Experimental College to be a Robyn Gittleman Graduate Teaching Fellow for Fall 2018.

Sponsored Courses: The ExCollege collaborates with other Tufts programs to offer courses and independent learning opportunities

EXP-0068 Designing Your Tufts: Get Career Ready Through Design Thinking

1 semester hour, Pass/Fail

Three sections available:

EXP-0068-AF Monday 5:00-6:30pm – for Engineering First-Year Students

EXP-0068-BF Tuesday 5:00-6:30pm – for Liberal Arts First-Year Students

EXP-0068-CF Wednesday 6:00-7:30pm – for Liberal Arts First-Year Students

As a first-year student, you will find an abundance of amazing courses, co-curricular experiences and related opportunities awaiting you. You may be tempted to think that you need to "do it all" to get the most from your Tufts experience. However, we know from experience that this kind of thinking can often lead to undue

stress and strain for many students...and often does not result in the intended goal! Why not learn some basics on how to navigate a process with many great options and outcomes, but no one "right" choice? This course will teach you -- early in your college career -- to apply design thinking strategies to explore college and life experiences that are more meaningful to you and build the core competencies and career readiness that employers value today. Through activities and field-based experiences, you'll learn how design thinking can help you explore options, and at the same time, help you wrestle with a "wicked" problem: How do I know if I'm on the right track if I don't know exactly what the destination is?

Robin Kahan (EXP-0068-AF Mondays for Engineering students) is the Associate Director, Engineering Career Services at Tufts University and a Tufts Alumna. She has worked at Tufts for 13 years providing career advising and programming for all engineering and computer science undergraduate and graduate students. Prior to Tufts, Robin spent 21 years at Analog Devices in progressive Human Resources roles, the most recent being World-Wide Manager of College Relations. Robin has an MBA with a concentration in Human Resources from the Johnson School at Cornell University and a Bachelor of Arts in Economics from Tufts University.

Donna Esposito (EXP-0068-BF Tuesdays for Liberal Arts students) is the Director of Career Development at the Tufts University Career Center. She oversees career education and advising, as well as programming for undergraduate students and has over 25 years of experience in career development and higher education. Prior to Tufts Donna held positions at Harvard University, Stonehill College and Bridgewater State College. Donna has an MA in Counseling Psychology, with a specialization in College Student Personnel Services from the University of California at Santa Barbara.

Gregory J. (Greg) Victory (EXP-0068-CF Wednesdays for Liberal Arts students) joined Tufts University as the executive director of career services in July 2016. He previously served as executive director, continuing and executive education at the Rhode Island School of Design (RISD) where he developed innovative programming for executives, adult learners and youth. Victory taught for many years in the Communications and Rhetorical Studies department at Syracuse University.

EXP-0069-XF Personal Career Development

*2 semester hours, Pass/Fail
Thursdays, 4:30-6:00pm*

Based on an examination of several major career development theories, students will apply key concepts to their own career development process, focusing on thoughtful self-reflection, major and career exploration, and the value of internships as tools in the exploration and decision-making process. Through activities, reading assignments, analysis, and writing, students will discover more about themselves and the world of work. This course is ideally suited to sophomores who are beginning the career planning and decision-making process.

Donna Esposito is the Senior Associate Director of the Tufts Career Center, overseeing all career counseling and programming for undergraduate and graduate students in the School of Arts and Sciences and the School of Engineering. With more than 25 years of experience in career development, she has worked for Tufts for 18 years and previously held positions at Harvard and Stonehill Colleges. She has an MA in Counseling Psychology, with a specialization in College Student Personnel Services/College Student Development from the University of California at Santa Barbara.

Malakia Silcott is an Assistant Director/Career Advisor in the Tufts Career Center and focuses on programming for first and second year students. She also provides career advising across all class years and majors, and is a highly skilled student development professional with more than 15 years of experience in higher education. Malakia holds a Master of Science degree in College Student Development and Counseling

from Northeastern University and a Bachelor of Arts in Psychology and African American Studies from Oberlin College.

EXP-0070-XAF Basic RAD

*2 semester hours, Pass/Fail
Tuesdays, 4:30-6:00pm*

This course includes lectures, discussion, and self-defense techniques suitable for women of all ages and abilities. The Rape Aggression Defense System (R.A.D.) is based on the philosophy of choices: "to develop and enhance the OPTIONS of self-defense, so that they become more viable considerations for the woman who is attacked." While it is completely natural to resist, unless a woman is trained to do so the resistance she attempts may be futile.

This course will try to strengthen innate survival techniques by making more options available. Preparation through education and training is usually the best way to survive an assault situation. Issues that will be addressed include awareness and prevention, sexual assault definitions, patterns of encounter, the decision to resist, basic principles of self-defense, and the defensive mindset. This course will end with an optional realistic simulation training.

Instructors are members of the Tufts University Police Department and certified R.A.D. Instructors.

EXP-0070-XBF Basic RAD

*2 semester hours, Pass/Fail
Thursdays, 4:30-6:00pm*

This course includes lectures, discussion, and self-defense techniques suitable for women of all ages and abilities. The Rape Aggression Defense System (R.A.D.) is based on the philosophy of choices: "to develop and enhance the OPTIONS of self-defense, so that they become more viable considerations for the woman who is attacked." While it is completely natural to resist, unless a woman is trained to do so the resistance she attempts may be futile.

This course will try to strengthen innate survival techniques by making more options available. Preparation through education and training is usually the best way to survive an assault situation. Issues that will be addressed include awareness and prevention, sexual assault definitions, patterns of encounter, the decision to resist, basic principles of self-defense, and the defensive mindset. This course will end with an optional realistic simulation training.

Instructors are members of the Tufts University Police Department and certified R.A.D. Instructors.

EXP-0079-XF EPIIC: Migration in a Turbulent World

*3 semester hours, Letter-graded
Tuesdays/Thursdays, 3:00 – 4:15pm*

How do we approach the multi-dimensional aspects of migration in today's world?

The 2018-19 EPIIC Course (Education for Public Inquiry and International Citizenship) will grapple with the multidimensional aspects of migration. The importance of migration today is clear. Concerns with the demographic, economic, social, security, legal, and political consequences of international migration have also increased. Discussions on issues such as national security, xenophobia, racial discrimination, social integration, unemployment, brain-drain and brain-gain, human trafficking, and asylum claims have led to a reexamination of international migration policies and the potential benefits and disadvantages to sending, receiving and transit countries.

Many states are questioning whether migration can bring benefits and opportunities to all parties – migrants, states of origin, states of transit and receiving states. With the attention now paid to counter-terrorism and violent extremism, cooperative efforts to address national security concerns posed by the movement of people has become a pressing issue for both receiving countries and countries of origin. And while migration has long been a sensitive matter of national sovereignty, it now encompasses regional and international dimensions.

Abi Williams (F'87) is the Director of the Institute for Global Leadership (IGL), and Professor of the Practice of International Politics at The Fletcher School of Law and Diplomacy. Dr. Williams brings to both positions thirty years of experience in leadership roles in the varied worlds of think tanks, the United Nations, and academia. He received his M.A.L.D. in 1986 and his PhD in International Relations in 1987 from The Fletcher School. He is an alumnus of IGL's flagship program, Education for Public Inquiry and International Citizenship (EPIIC) and in 2001 received the EPIIC Alumnus Award. In 2012, he was recognized for his global service and received the Dr. Jean Mayer Global Citizenship Award.

He joined Tufts in 2017 after a four-year tenure as the first President of The Hague Institute for Global Justice. Prior to leading The Hague Institute, Dr. Williams served at the United States Institute of Peace as Senior Vice President of the Center for Conflict Management and as the Director of Strategic Planning for United Nations Secretaries-General Ban Ki-Moon and Kofi Annan in New York.

EXP-0079-XAF Inquiry Simulation: Migration

*2 semester hours, Pass/Fail
Tues/Thurs 3:00 – 5:00 pm*

Inquiry, the Institute for Global Leadership's global issues simulation for high school students, is entering its 27th year working with a broad range of schools in six states. More than 250 high school students participate annually in the program. Inquiry's goal is to facilitate the understanding of complex and compelling issues of global and domestic concern through investigative methods and role-playing techniques. An important emphasis of this program is preparing students for global citizenship and critical assessment of human and international security issues.

Tufts students in the Inquiry class will mentor the delegations from October through the culminating role-playing simulation in April (via Skype and, where possible, by visiting). Tufts students will also develop, enact and facilitate the role-playing simulation.

The issues Inquiry addresses are current and real and the high school students are encouraged to think outside of the box about solutions (while keeping their role's interest in mind), not compete against each other.

Inquiry 2018-19 will focus on Migration. It is a 2 semester-hour course each semester.

Heather Barry is the Associate Director of the Institute for Global Leadership.

EXP-0080-XF Writing Fellowship Seminar

3 semester hours, Pass/Fail

Thursdays, 4:30-7:00pm

In this course, new Writing Fellows explore theoretical frameworks and practice foundational skills as they learn how to become good peer tutors and develop their own tutoring philosophies. The class is held during rather than before the first semester of tutoring in order to reinforce the importance of self-reflection as a necessary part of any teaching practice. The course also emphasizes the "fellowship" that is an essential and unique aspect of the Tufts Writing Fellows program by creating a community of writers and developing educators: peers supporting peers as writers and novice writing tutors.

This course is open to only students who have already been accepted into the Writing Fellows Program.

Kristina Aikens is Program Director for Writing Support in the Academic Resource Center at Tufts. She holds a PhD in English from Tufts and has tutored and taught writing since 2001.

EXP-0083-XF Civic Identity, Reflection, & Action: Tisch Scholars Foundation Seminar

4 semester hours, Letter-graded

Fridays, 10:30 am - 1:15pm

This course is only open to Tisch Scholars.

This is a two part course that is the foundation for the Tisch Scholars Program. The weekly fall semester class meeting is longer than the spring semester class meeting. Tisch Scholars will take this course while concurrently working 8 hours per week at a community based placement.

Through this year-long course, Tisch Scholars will explore the connections between identity and systems of privilege, power, and oppression, and will apply their learning directly to their fieldwork. Students will learn to apply an asset-based approach to community work and will gain skills in dialogue and deliberation. The coursework will allow students to critically reflection the service learning work they are engaging with at their partner sites and share ideas on how to address social issues in the community. Scholars learn about Tufts partner communities and forge meaningful, reciprocal partnerships with community members through service and collaboration.

Sara Allred manages the Tisch Scholars Program, facilitating community-building among Scholars, overseeing their annual community projects, and supporting their ongoing training and development. She also provides support for community partners working with Scholars. Before joining Tisch College, Sara was an elementary/middle school art teacher with the Baltimore City Public School System. She has a strong background in community-based art service work, and her teaching focused on addressing social issues through art. She also worked on arts education access and arts integration advocacy initiatives in Baltimore. Sara holds a bachelor's degree in fine arts from the Massachusetts College of Art and a Master's degree in teaching from the Maryland Institute College of Art.

EXP-0084-XF Tisch Scholars Fieldwork Practicum

2 semester hours, Letter-graded

Wednesdays, 12:00-1:15pm

This course is only open to Tisch Scholars in the second or third year of the program.

Each semester that they participate in the program, Tisch Scholars will work 8 hours per week at a community-based placement. Scholars will continue learning about Tufts partner communities and forge meaningful, reciprocal partnerships with community members through service and collaboration. Scholars will meet several times per semester with their peers in the program to critically reflect on the work and learning they are engaging with at their partner sites and share ideas on how to address social issues in the community.

Sara Allred manages the Tisch Scholars Program, facilitating community-building among Scholars, overseeing their annual community projects, and supporting their ongoing training and development. She also provides support for community partners working with Scholars. Before joining Tisch College, Sara was an elementary/middle school art teacher with the Baltimore City Public School System. She has a strong background in community-based art service work, and her teaching focused on addressing social issues through art. She also worked on arts education access and arts integration advocacy initiatives in Baltimore. Sara holds a bachelor's degree in fine arts from the Massachusetts College of Art and a master's degree in teaching from the Maryland Institute College of Art.

EXP-0095-F Hindi 3

*3 semester hours, Letter-graded
Tuesdays & Thursdays, 1:30-3:10pm*

This course will build on Hindi 1 and 2, and will complete the study of the major language structures of modern Hindi. The focus will be on the use of idioms, vocabulary building, and differences between spoken and written Hindi. Goals: Develop enough vocabulary needed for some fluency in speaking, increase speed of reading/writing, and begin to grasp abstract concepts in Hindi. Reading material will include stories, short essays, and some material from Hindi language newspapers.

The Hindi 1, 2, 3 sequence has been approved to meet Part 1 or Part 2 of the Language Requirement.

Saudamini Deshmukh has developed and taught intensive Hindi courses through the Defense Language Institute, and has taught college-level courses in the Washington, D.C. area. She earned a PhD from Harvard University in Sanskrit and Indian Studies, followed by a research fellowship at the Indian Institute of Advanced Study.

EXP-0100-ZEF Leading a First-Year Seminar

*3 semester hours, Pass/Fail
By arrangement only.*

Upper-level students selected and trained for this program will design and teach a semester-long Explorations course for first-year students. Explorations is one of the ExCollege's signature "Advising Plus" programs for entering students. In addition to planning and conducting weekly classes, Explorations seminar leaders serve as peer advisors to the students in the class. Ongoing support and supervision for Explorations leaders is provided through the required 1 semester hour seminar EXP-0102-ZEF Teaching Practicum.

Amy Goldstein is the Assistant Director of the Experimental College and directs Explorations, the ExCollege's signature advising program.

EXP-0100-ZPF Leading a First-Year Seminar

*3 semester hours, Pass/Fail
By arrangement only.*

Upper-level students selected and trained for this program will design and teach a semester-long Explorations course for first-year students. Explorations is one of the ExCollege's signature "Advising Plus" programs for entering students. In addition to planning and conducting weekly classes, Explorations seminar leaders serve as peer advisors to the students in the class. Ongoing support and supervision for Explorations leaders is provided through the required 1 semester hour seminar EXP-0102-ZPF Teaching Practicum.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.

EXP-0102-ZEF Teaching Practicum

*1 semester hour, Pass/Fail
Mondays, 12:00-1:00pm*

This weekly seminar is designed to facilitate undergraduate team-teaching for those leading fall semester Explorations seminars for incoming first-year students. Weekly group meetings will be held, in which student teachers will be exposed to a range of teaching techniques and theories, and given a forum for discussing the unique problems that new teachers often encounter.

Amy Goldstein is the Assistant Director of the Experimental College and directs Explorations, the ExCollege's signature advising program.

EXP-0102-ZPF Teaching Practicum

*1 semester hour, Pass/Fail
Mondays, 12:00-1:00pm*

This weekly seminar is designed to facilitate undergraduate team-teaching for those leading first-semester Perspectives seminars for incoming first-year students. Weekly group meetings will be held, in which student teachers will be exposed to a range of teaching techniques and theories, and given a forum for discussing the unique problems that new teachers often encounter.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.

EXP-0104-Teaching Assistantship

*2-3 semester hours (variable), Pass/Fail
ARR*

This course is designed to assist the undergraduates who are teaching assistants for courses in the Experimental College.

For more information, contact the Experimental College office at 617-627-3384.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.

EXP-0105-ZFF Independent Study

*2-3 semester hours (variable), Letter-graded
By arrangement only.*

Topics must fall within the range of courses taught by the Experimental College. For more information, contact the Experimental College office at 617-627-3384.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.

EXP-0105-ZPF Independent Study

*2-3 semester hours (variable), Pass/Fail
By arrangement only.*

Topics must fall within the range of courses taught by the Experimental College. For more information, contact the Experimental College office at 617-627-3384.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.

EXP-0106-ZF Auditing for Breadth

*2-3 semester hours (variable), Pass/Fail
By arrangement only.*

This program is intended to provide students with an opportunity to broaden their education by attending courses in which they might not otherwise enroll. With the approval of the instructors in question, students may elect to audit any three university courses during their four years as an undergraduate. 3 semester hours are awarded upon completion of the three audits. Please note: graduating seniors may audit two courses and receive 2 semester hours.

For more information, contact the Experimental College office at 617-627-3384.

Howard Woolf is the Director of the Experimental College and an Associate Dean of Undergraduate Education.