## Washington University in St. Louis

## Beyond Boundaries Program

Beyond Boundaries is a framework of classes and resources that allows students to understand issues in an interdisciplinary way. Faculty from the School of Medicine, Olin Business School, Brown School, School of Law, McKelvey School of Engineering, Sam Fox School of Design & Visual Arts, and Arts & Sciences collaborate in the Beyond Boundaries Program to produce an interdisciplinary curriculum rich with possibilities for students with interests that do not fit within the confines of traditional subject matter.

Beyond Boundaries aims to bring a student's different interests into conversation with each other in order to approach the big social and intellectual problems of tomorrow. This is a different approach than having two majors, which indicates an interest in two separate fields of study. Many students in the program may have two majors, but this is not a requirement of the program.

## Requirements

Beyond Boundaries spans the first two years of a student's time at Washington University, with the option to continue into the third and fourth years. At the beginning of their second year, Beyond Boundaries students matriculate into their chosen school and declare a major during the spring semester.

- Students who participate in both the first and second years of the Beyond Boundaries Program will receive a milestone notation on their transcripts.
- Students who complete years three and four of the program, regardless of whether they entered during their first or third year, will receive a milestone notation on their transcripts.

The required curriculum (p. 1) of year one includes College Writing, multiple Beyond Boundaries courses (p. 2), and a first-year 1-credit seminar (fall and spring semesters, Beyond Boundaries students only). During year one and two (and beyond if applicable), program students also have the opportunity to participate in a variety of lectures, seminars and community-building events that count toward program requirements.

Students participating in Beyond Boundaries can still complete their graduation requirements in four years.

The minimum GPA requirements needed to maintain eligibility for Satisfactory Academic Progress are dictated by the specific program of study. In each case, per the requirements of 34 C.F.R. 668.34(a)(4(ii), the federal student aid program requires a minimum of a C average to maintain eligibility for aid, but an individual degree or certificate program may have a higher minimum GPA for federal Satisfactory Academic Progress. Beyond Boundaries Program students are required to maintain a 2.0 cumulative GPA. To be in good academic standing in the program on a semesterly basis, students are expected to complete a minimum of 12 units per semester with a minimum 2.0 semester GPA.

In special circumstances, if a first-year program student wishes to leave the program, they must be approved for a transfer to an undergraduate division, either before the fourth week of the fall semester or after the fall semester has finished. The approval of the Beyond Boundaries Program as well as the proposed school is required.

### Who Should Apply

Students who are talented, self-initiated and self-motivated and who wish to pursue their own broad interdisciplinary interests through a unique education experience that requires collaboration across academic disciplines and perspectives should consider applying to this program (https://beyondboundaries.wustl.edu/apply/).

### Who Should Not Apply

Students interested in pursuing degrees in biomedical engineering, chemical engineering, and environmental engineering cannot participate in the program due to specific track-based requirements.

These students are invited to apply for year three of the Beyond Boundaries Program, which spans the student's third and fourth years and includes a fourth-year capstone experience.

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### Curriculum

## Year One (11 required credits)

Year one requirements include an introductory sequence that teaches writing, the framework of interdisciplinary study, and collaborative problem-solving as well as multiple Beyond Boundaries courses.

#### Fall Semester:

- Beyond Boundaries seminar (1 credit, Beyond Boundaries students only)
- · Beyond Boundaries course (3 credits)
- College Writing (3 credits)

#### Spring Semester:

- Beyond Boundaries seminar (1 credit, Beyond Boundaries students only)
- Beyond Boundaries or Bear Bridge course (3 credits)



### Year Two (point-based system)

During their second year, students will matriculate into their chosen school and declare a major in the spring, as is typical of undergraduate students. Beyond Boundaries students will take a majority of their classes within their academic division during their second year, but they will also be involved in the second year of the program, which involves a less-structured curriculum to ensure that they are able to fulfill their major and school-specific requirements.

Components of year two will include several selections from the following options:

- Interdisciplinary courses (within the student's chosen school)
- Weekend topic-based problem-solving seminars
- · Co-curricular service opportunities
- Lecture series (university-wide offerings that include prominent scholars, businesspersons and advocates)
- Spring-break opportunities
- · Networking and community-building events
- Discussion participation (as part of interdisciplinary lectures on campus)

These various opportunities are designed to allow students the flexibility to achieve their academic and co-curricular goals outside of the program while keeping them connected to the program community.

Students who complete years one and two of the Beyond Boundaries Program receive a milestone notation on their transcript. Students may opt to continue this program into their third and fourth years.

Students accepted into the Beyond Boundaries Program prior to matriculation at Washington University can automatically continue into years three and four of the program.

## Year Three (point-based system)

Year three will also be open to incoming third-year students who did not start their time at Washington University as a part of the Beyond Boundaries Program. These students must apply to join the program at this point, and they will be selected for participation based on their demonstrated interest in interdisciplinary study and problem-solving.

Year three is flexible, and it is similar to year two with its requirementbased system. Students can fulfill these requirements through a combination of multiple selections from the following options:

- · Upper-level interdisciplinary course work
- Select courses in the graduate and professional schools
- Co-curricular service and community-building activities
- Meaningful study-abroad opportunities

The program offers students exposure to information about career and educational paths that they may be interested in pursuing after graduation.

#### **Year Four**

Year four of the Beyond Boundaries Program involves an interdisciplinary or collaborative capstone project that will be coadvised by two faculty members. This allows students to offer multidisciplinary perspectives on their work and to benefit from close faculty mentorship.

#### Courses

### Year One Courses for Beyond Boundaries Students

# Beyond Boundaries Seminar (2 credits total)

This course, led by Beyond Boundaries Program Director Rob Morgan, is 1-credit, Pass/Fail and offered during both the fall and spring semesters of the first year.

#### **I60 BEYOND 100 Beyond Boundaries Seminar**

This course will cover selected relevant topics, including interdisciplinary projects and lectures, collaboration, ideation exercises, and college student development. It is an interactive seminar in which each program participant will participate in prototyping futures, mind-mapping, salon-type discussions, dialogue, reflection and related activities. There will be opportunities to meet and hear from faculty representing all seven schools at Washington University. The knowledge gained is designed to contribute to academic success, personal development, and a more rewarding social and academic experience over the course of the college experience. This course is required for all first-year students in the Beyond Boundaries program and open only to first-year students in the Beyond Boundaries program. Credit 1 unit. A&S: FYBB

### College Writing (3 credits)

During the fall semester of the first year, Beyond Boundaries program students will take a 3-unit common College Writing course (a requirement for most first year students at Washington University). This course will focus on basic writing skills and communication across disciplines, and it will meet three days per week. The course will be taught by a faculty member of the program in sections of 12 students. It will include various contributions from faculty in other departments and from across divisions through lecture series, class visits, panels and interviews. The courses will be grouped into six themes — Citizen Scientist, Dreams & Nightmares, Writing Identity, Place & Perspective, Power & Commodity Culture, and Technology & Selfhood — into which students will self-select.



# Beyond Boundaries Courses (3 credits each)

In addition to the 5-credit introductory series listed above, first-year students in the Beyond Boundaries Program will be required to complete another 6 units of program-related courses. A student can choose to take two Beyond Boundaries courses (one in the fall and one in the spring) *or* one Beyond Boundaries course in the fall (3 credits) and a First-Year Bear Bridge course (3 credits; only open to program students) in the spring.

Beyond Boundaries courses, which are funded by the Office of the Provost, are designed to prepare students for a rapidly evolving world characterized by social, political, scientific and economic problems that cannot be solved using knowledge from a single discipline. These courses are team-taught by faculty from different schools across Washington University, and they offer a window into how scholars from different disciplines approach big, critical topics like our aging population, the nature of creativity, the phenomenon of climate change and the evolving art of medicine.

These courses will offer students in the Beyond Boundaries program tangible examples from interdisciplinary approaches to these topics, including those of faculty from across schools participating in collaborative exploration. Some courses within the different schools that have been predesignated by the faculty lead team as meeting the requirements of interdisciplinary courses may also count toward this requirement during the spring semester.

## I60 BEYOND 101 Earth's Future: Causes and Consequences of Global Climate Change

Earth's Future: Causes and Consequences of Global Climate Change examines the following: 1) the physical basis for climate change; 2) how climates are changing and how we know and assess that climates are changing; and 3) the effects of climate change on natural and human systems. The course is team-taught and will involve participation by scholars across the university with expertise in specific subjects. This is a broad introductory course for first-year students, and it presumes no special subject matter knowledge on the part of the student. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S: FYBB A&S IQ: NSM Arch: NSM Art: NSM BU: SCI

#### **I60 BEYOND 102 The Business of Elections**

This course will focus on understanding the primary and presidential elections -- particularly the 2020 election -- through a multidisciplinary approach that primarily involves political science and business. Campaigns are start-ups that rely on strategy, branding, influencing consumers (voters), financing and other concepts to achieve the election of their candidate. At the same time, American politics is highly polarized, with voters who are increasingly hostile to listening to the other side. Given this context, how does a campaign succeed as an entrepreneurial venture? This course will allow students to compare and contrast how different candidates' policies and platforms may affect different constituencies/sectors of the business/labor world as well as the economy, how the media portrays them, and what role they will play in the general election. This course is for first-year (nontransfer) students only. Students who are not first-year students will be automatically unenrolled from this course.

Credit 3 units. Arch: SSC Art: SSC BU: BA EN: S

## I60 BEYOND 105 The Endgame of Entrepreneurship: Leveraging Capitalism for Good

Historically, profit has been a key driver of human behavior. In this course, students will learn to take advantage of the profit-seeking motive of capitalism while also learning from the mistakes and unintended consequences capitalism has caused throughout history. Students will apply these learnings toward profit-seeking solutions for the United Nations' Sustainable Development Goals, which are global challenges that call us to work together with boldness and urgency. We will explore how skills from entrepreneurship and venture creation can be used to improve water, climate, education and gender equality globally and here in St. Louis. In interdisciplinary teams, students will learn how to define a problem; listen to customers, competitors and collaborators; create value; measure impact; and communicate their vision. Bold entrepreneurial spirit and skills learned in this course will guide students in their further studies at Washington University and beyond. This course does not count for Economics major/minor elective credit. This course is for first-year (non-transfer) students only. Credit 3 units. A&S IQ: SSC Arch: SSC Art: SSC BU: BA, ETH EN: S

## I60 BEYOND 115 Environmental Racism and the Health of Everyone

Environmental inequalities threaten the health and well-being of lowincome communities and communities of color who are increasingly on the frontlines in the fight against climate change, air and water pollution, food security, and many other urgent environmental problems. Like many urban areas, the St. Louis region faces egregious social, environmental and health disparities. In this course, we critically examine the role of racism and other structural policy inequalities that produce unequal environments and how those unequal environments contribute to public health disparities in St. Louis and beyond. We explore the use of public health data, policy options, and case studies that allow for evidence-based solutions to environmental racism and improved population health. This course that combines small group sessions, case studies and speakers working on environmental justice in the St. Louis region. We provide students with interdisciplinary perspectives and methods, challenging them to address racism and environmental policy through a population health lens. Student learning will be assessed through case studies, reflections, online assignments, and exams. This course is for first-year (non-transfer) students only. Students who are not first year students will be unenrolled from this course.

### Credit 3 units. A&S IQ: SSC EN: S

#### 160 BEYOND 120 Religious Freedom in America

The intersection of religion and law in American society has sparked some of the fiercest cultural engagements in recent memory: Should a for-profit religious corporation have a right not to fund birth control for its employees? Can a public college expel campus religious groups whose membership is not open to all students? May a Muslim in prison grow a beard for religious reasons? Should a cake baker or a florist be permitted to refuse services for a gay wedding? Can a church hire and fire its ministers for any reason? These current debates and the issues that frame them are interwoven in the American story. This course introduces students to the major texts and historical arguments underlying that story. Drawing from the respective expertise of the instructors, the course will expose students to a variety of scholarly methods related to the issue: legal history and case law, intellectual history and canonical texts, social history and narrative accounts, and political philosophy and contemporary analyses. This course is for firstyear (non-transfer) students only.

Credit 3 units. A&S IQ: HUM, SC Arch: HUM Art: HUM BU: ETH, HUM EN:  $\ensuremath{\mathbf{H}}$ 



#### 160 BEYOND 123 When I'm Sixty-Four: Transforming Your Future

Whether you know it or not, you're living in the midst of a revolution - a revolution that is going to change your personal and professional lives. Although old age may seem a long way off, you'll likely live to age 80 or beyond, with a 50% chance of seeing your 100th birthday. The demographic revolution you're going to live through will change the health care you receive, the house you live in, the car you drive, the jobs you do, and the relationships you have. This class will give you a competitive edge in understanding how you can harness what's happening to shape your career and lifestyle. In class you'll be introduced to leaders and ideas from many fields - medicine, engineering, architecture, public health, social work, law, business, art, and psychology - focused on the issues of our aging society. There will also be opportunities to tailor the class to your interests through events on and off campus, including movies, lectures, performances, field trips, and community projects. Each week, we'll gather for lectures and also break into small groups for discussion. This course will set you on a path to lead the aging revolution and transform the society of tomorrow. This course is for first-year (non-transfer) students only. Credit 3 units. A&S: FYBB A&S IQ: SSC Arch: SSC Art: SSC BU: BA EN: S

#### 160 BEYOND 125 St. Louis and the Documentary Image

From magazines to maps to documentary movies and TV, we look to pictures to tell us the truth. But no image is ever completely objective; every visual reflection of the real world is mediated by technology, culture, politics, and memory. How do we-as viewers, as creators, as people-sort out the complicated claims pictures make on the world around us? Drawing on collaborations between four areas in two schools-Visual Arts, English, American Culture Studies, Film and Media Studies-this class will introduce students to theories and practices of visual nonfiction within the city of Saint Louis. Through immersive, site-specific course units focused on a variety of approaches to visual nonfiction in different media, students will engage with the tumultuous history, material culture, and landscapes of St. Louis. The course will introduce first-year students both to their city and their university, preparing them to explore existing coursework in Arts & Sciences and the Sam Fox School. This course is for first-year (non-transfer) students only. Students who are not first year students will be unenrolled from this course.

Credit 3 units. A&S IQ: HUM, SC Art: FAAM

#### 160 BEYOND 130 The Art of Medicine

This interdisciplinary, cross-school course at the intersection of history, visual culture and the visual arts includes a roster of notable speakers and offers students a singular encounter with western medicine from ancient times to the present day. In tandem with the history of medicine, the course examines the capacity of the arts to frame medical practice and to raise questions and influence perceptions, both positively and negatively, of medical advancements. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S: FYBB A&S IQ: HUM Arch: HUM Art: HUM EN: H

#### 160 BEYOND 140 To Sustainability and Beyond: People, Planet, Prosperity (P3)

This class examines the subject of sustainability from multiple perspectives to gain an appreciation for its interconnected environmental, social, and economic dimensions. We explore foundational concepts and principles through a variety of activities and assignments, including readings, discussions, group work, case studies, presentations, and projects. The goal is to integrate knowledge and methods from different disciplines to achieve a holistic understanding of sustainability problems and solutions. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S: FYS A&S IQ: SSC Arch: SSC Art: SSC EN: S

#### 160 BEYOND 160 Gender, Youth, and Global Health

Through in-depth case studies, this course provides an introduction to gender-specific issues in the context of childhood and adolescence, poverty, and global health. Students will learn to identify how gender and gender differences affect conditions of life in the areas of reproductive health, nutrition, conflict, access to healthcare, and the social determinants of health, especially for young people. Students will learn to analyze health conditions and disparities in relation to both the micro dynamics of local worlds and the macro dynamics of large-scale social forces in the postcolonial global field. In addition, students will come to understand the current challenges that global health practitioners and institutions confront in achieving gender equity and the current efforts toward closing the gap. These learning objectives will be achieved using lectures as well as discussion-based sessions and Skype-based interactions with NGOs and experts who are currently working in the field. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S: FYBB, FYS A&S IQ: SSC, SD Arch: SSC Art: SSC BU: BA, IS EN: S

#### **I60 BEYOND 161 Morality and Markets**

What does it look like to live a moral life in today's market system? We know all too well what it does not look like. The news is filled with moral failures of leaders and executives at top firms. We like to believe that we would behave differently, but what kinds of pressures inform our moral choices? What pulls us, what pushes us, and what persuades us to act one way rather than another? These are the questions that a course combining business and literature can address in unique ways; the world of fiction helps us to examine the ethical dilemmas of the market we inhabit every day. In this course, we use great books, classics of film and modern television, and the tools of modern psychology and business strategy to think critically about what is entailed in living a moral life in the midst of the modern market. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S IQ: HUM Arch: HUM Art: HUM EN: H

## I60 BEYOND 175 Designing Creativity: Innovation Across Disciplines

From "a-ha!" epiphanies to slow-developing discoveries, the creative process has been employed by innovators and artists in virtually every corner of the globe for centuries. This course will explore the study and practice of the creative process across many disciplines, with input from prominent thinkers and practitioners in the areas of medicine, neuroscience, law, engineering, architecture, human-centered design, business, stage design, and the performing arts. The course will also incorporate the practice of design thinking and creativity techniques via a lab component that will allow students to explore the development of innovative ideas in collaborative teams followed by project presentations to core faculty and classmates. This course is for first-year (non-transfer) students only.

Credit 3 units. A&S: FYBB A&S IQ: HUM Arch: HUM Art: FADM, HUM BU: HUM FN: H

# First-Year Bear Bridge Courses (3 credits)

In the spring semester, students in the Beyond Boundaries cohort have the opportunity to apply their interdisciplinary knowledge to important social and intellectual questions via one of two Bear Bridge courses (only open to program students). As mentioned above, students can opt to take a Bear Bridge course in the spring instead of a second Beyond Boundaries course.

#### Bulletin 2023-24 Beyond Boundaries Program (02/21/24)



Bear Bridge courses are intended to do the following:

- Apply knowledge and experience from team-taught Beyond Boundaries courses in a project-based, applied context.
- Reinforce cohort experiences within the Beyond Boundaries
  Program. Students enrolled in the Beyond Boundaries Program will
  have additional curricular and cocurricular cohort-building, and
  Bear Bridge courses will reinforce these connections.
- Prepare students for ongoing interdisciplinary approaches during their following three years on campus. Bear Bridge courses offer students a set of tools that can be used to apply interdisciplinary approaches, including informing their choice of major, their approach to their capstone project, and their self-identity as a scholar.

#### 160 BEYOND 110 Empathy First: Solutions with Heart

Decisions that impact the daily lives of people are often made without consideration of the lived experience of those impacted, resulting in harm and eroded trust. Empathy is a critical tool for understanding the lived experience of others and creating better quality of life for all people. This course will introduce the integration of empathy into decisions through the methods, processes, and approaches used in design and social work. Students will examine how empathy is incorporated into the development and implementation of new solutions to wicked problems through conversations with experts in health, law, and business; community-based team projects; and reflection and discussion. Course activities will build cohort connections. This is a Bear Bridge course open only to students in the Beyond Boundaries Program.

Credit 3 units. A&S IQ: SSC Arch: SSC Art: SSC EN: S

## I60 BEYOND 111 Law, Race, and Design: Examining the St. Louis Story

This interdisciplinary course focuses on the intersection of law, race, and design in St. Louis. From Dred Scott to Ferguson, St. Louis has served as a focal point for some of the most important issues in our country's long and still unfinished work toward racial equality. The law has played an important role in these developments; judicial opinions, city ordinances, and commission reports have shaped how we understand questions of race and equality. But the law is not simply the written word: it involves people, practices, places, and the stories we tell about them. How we communicate our stories ultimately affects how we understand those stories and how we understand ourselves. This course situates law within stories and equips students to communicate those stories in ways that draw from a range of communication design methodological tools. Using design research, thinking, and a human-centered design approach, this course will challenge students to connect the words of legal documents with the experiences of those whose lives are situated by them. There will be two required self-guided visits outside of normal class time, each of which should take 2.5 - 3 hours, including travel to and from the site. Accommodations for normal class sessions (either ending early or canceling class) will take place to offset some of this time commitment. This is a Bear Bridge course required for all first-year students in the Beyond Boundaries program; it is open only to students in the Beyond Boundaries program.

Credit 3 units. A&S IQ: HUM, SC Arch: HUM Art: HUM EN: H