# Attracting Students to the Liberal Arts Through Integrative Curricula



$\Lambda_{i,i+h}$	
AUIIIOI.	
,	

Scott Muir

Director of Undergraduate Initiatives
smuir@nhalliance.org

Muir, S. (2024). Attracting Students to the Liberal Arts Through Integrative Curricula. Washington, D.C.: National Humanities Alliance.

The National Humanities Alliance (NHA) is a nationwide coalition of organizations advocating for the humanities on campuses, in communities, and on Capitol Hill. Founded in 1981, NHA is supported by over 270 member organizations, including: colleges, universities, libraries, museums, cultural organizations, state humanities councils, and scholarly, professional, and higher education associations. It is the only organization that brings together the U.S. humanities community as a whole.

The NHA is a 501(c)(4) nonprofit association and is strictly nonpartisan. The National Humanities Alliance Foundation is the 501(c)(3) supporting foundation of the National Humanities Alliance. It works to research and communicate the value of the humanities to a range of audiences including elected officials and the general public. This resource is a product of the National Humanities Alliance Foundation and is funded by a generous grant from the Arthur Vining Davis Foundations.

### Attracting Students to the Liberal Arts Through Integrative Curricula

Introduction	4
Integrative Approaches to General Education	8
Integrative Degree Programs Profession-Oriented	23
Problem-Oriented  Integrative Infrastructure	34

## Introduction

## Integrating Across Disciplines to Illustrate the Value of Liberal Education

At a time when more and more undergraduates are pursuing specialized, technical curricula, initiatives that integrate learning across disparate fields help demonstrate the value of a broad-based education to skeptical students. This report aims to support faculty and administrators in developing undergraduate courses and programs that integrate the humanities, social sciences, and natural sciences with applied approaches and preprofessional training. Through detailed case studies of existing programs, the report explores the nuts and bolts that underpin each initiative. It also leverages student survey data and testimonials to illuminate how integrating distinct disciplines enhances students' learning and shifts their understanding of the value of liberal arts disciplines. It is designed to support higher ed faculty and administrators in addressing the growing trend towards specialization by helping students see the value of a broad-based, liberal arts education.

Throughout the report, we use the terms liberal arts education, liberal education, and liberal learning to refer to a broad-based education that includes a mix of humanities, social sciences, and natural sciences. We also refer to disciplines within these fields, which are commonly gathered together in colleges of arts and sciences, as liberal arts disciplines. While such disciplines are sometimes understood in contrast to applied sciences and professional training, the initiatives featured in this report involve collaboration between faculty in the liberal arts and those in applied sciences and pre-professional programs. Across the board, a major goal of these case studies is to demonstrate that liberal arts disciplines contribute to solving complex problems and preparing students for a variety of careers. In this way, these efforts challenge arguments questioning the utility of a liberal arts education and underscore the importance of sustaining traditional disciplines, without which such integrative initiatives would not be possible.

Recognizing that efforts to integrate learning across disciplines take different forms, this report highlights three broad approaches:

- (1) Integrative approaches to general education (gen ed) in which disparate fields are combined within a single course (e.g., gen ed courses at the University of Pittsburgh that integrate humanities and social science disciplines with business, engineering, and computer science) or set of courses (e.g., a gen ed pathway at Ursuline College that connects arts, humanities, and natural science courses through place-based learning). These initiatives leverage gen ed requirements to demonstrate the value of combining distinctive disciplinary approaches to a shared topic or problem.
- (2) Integrative degree programs that connect learning from disparate fields of study to prepare students for specific careers (e.g., a certificate in Spanish for Healthcare and Human Services at Ramapo College) and/or identify solutions to major problems (e.g., a liberal arts-based sustainability major at San Diego State University). Such programs can make the pragmatic and professional value of a liberal arts curriculum more legible to students, parents, and employers.
- (3) Infrastructure to support integrative learning across campus (e.g., a center at Creighton University established to support the integration of liberal arts and professional training across the curriculum through a variety of interventions). This infrastructure equips and supports faculty and administrators in the challenging work of building bridges between disparate fields and units on campus to facilitate integrative educational experiences for students.

#### The Context

A number of developments have led observers to conclude that liberal education, the bedrock model for higher learning in the United States, is under threat. Since 1970, there has been a gradual but decisive shift in students' educational priorities from intrinsic educational aims toward extrinsic financial goals. Meanwhile, rising costs and declining public and private funding have placed an ever-growing financial burden on students and their families. As a result, more students are prioritizing specialized training they believe will boost their earning potential over exploring a wide range of disciplines. In addition to shifting student priorities, many commentators have also pointed to the lack of coherence in liberal arts gen ed curricula as a major cause of this shift. For example, a frequent faculty contributor to *Inside Higher Ed* recently observed that "there is a widespread sense that the gen ed curriculum has degenerated into a buffet of disciplinary-based introductory classes." When students do not see clear connections between the courses they take in disparate fields of study, they are less likely to appreciate the value of taking courses outside their major.

<sup>&</sup>lt;sup>1</sup> Terry O'Banion (2016) A brief history of general education, Community College Journal of Research and Practice, 40:4, 327-334.

In this context, observers across a wide range of fields have called for curricula that integrate learning across different disciplines, arguing that such curricula better provide the skills and knowledge necessary for the 21st century and showcase to students the relevance of a broad-based liberal arts curriculum. For example, the National Academies of Sciences, Engineering, and Medicine's 2018 *Branches from the Same Tree* report made a case for curricula that integrate approaches from the sciences, arts, and humanities.<sup>2</sup> The report argued that such integrative approaches provide broadly applicable and widely transferable human skills crucial to navigating a future characterized by rapid change and the extensive automation of technical tasks. The report's authors concluded with a recommendation "that further effort be expeditiously exerted to develop and disseminate a variety of approaches to integrated education and that further research on the impact of such programs and courses on students be supported and conducted." Meanwhile, over the past ten years the American Association of Colleges and Universities (AAC&U) has supported initiatives that promote integrative learning across disciplines, including "signature work" projects on a variety of campuses that facilitated poportunities for students to apply different disciplinary perspectives to complex questions. Through these initiatives, AAC&U has sought to demonstrate how liberal education prepares students to solve problems in their civic, professional, and personal lives.

The research on undergraduate humanities recruitment conducted by the National Humanities Alliance over the past five years also points to the value of integrative learning for engaging students in the humanities and showcasing the value of liberal learning more broadly. As NHA's 2020 report *Humanities Recruitment Survey:* Challenges and Audiences showed, declining enrollments in the humanities are due in part to students' lack of awareness of the many ways that liberal arts disciplines prepare them for the workforce.<sup>3</sup> Our 2021 report, Strategies for Recruiting Students to the Humanities: A Comprehensive Resource, highlighted how a wide range of initiatives that integrate humanities and other fields of study had succeeded in engaging a broader range of students in the humanities and shifting their perceptions of the applicability of humanities knowledge and skills.<sup>4</sup> In this way, curricular innovations that integrate learning across disciplines can be particularly effective in demonstrating the practical and personal value of areas of study whose relevance students may question.

At the same time, our research and engagements with faculty and administrators at a wide variety of institutions make clear that these integrative curricula are difficult to implement. To develop new courses and sustain them over time, faculty need both detailed examples of successful initiatives and help surmounting the very real challenges to creating courses. They also need tools for collecting data about the impacts of these courses and harnessing that data to communicate these impacts to a range of audiences in order to generate support for their work.

Recognizing these challenges, as well as the National Academies of Sciences, Engineering, and Medicine's call for more models and data, this report offers 12 in-depth case studies as well as several shorter snapshots of successful integrative undergraduate curricular initiatives. Each case study details the particularities of the integrative initiative while offering insight into how the faculty and administrators surmounted various hurdles in building it—from navigating institutional and disciplinary barriers to gaining buy-in from other faculty and administrators. Each presents evidence of the initiative's impact, including

<sup>&</sup>lt;sup>2</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine in Higher Education: Branches from the Same Tree*, Washington, D.C.: The National Academies Press.

<sup>&</sup>lt;sup>3</sup> Oliver, Y. & Muir, S. (2020). *Humanities Recruitment Survey: Challenges and Audiences*. Washington, D.C.: National Humanities Alliance

<sup>&</sup>lt;sup>4</sup> Muir, S. & Oliver, Y. (2021) *Strategies for Recruiting Students to the Humanities: A Comprehensive Resource*. Washington, D.C.: National Humanities Alliance.

enrollment data, student testimonials, and learning outcomes, as well as internal and external support for ongoing collaboration secured through these efforts—whether they are degree programs, general education initiatives, or infrastructure to support integrative projects. In addition, seven case studies feature student survey data collected by NHA in partnership with project directors that illuminate how and why these initiatives are helping students appreciate the value of liberal arts disciplines, integrative learning, and a broad-based curriculum.

#### Methodology

In Fall 2022, we distributed a survey to deans and associate deans at 857 institutions which invited them to share undergraduate courses or programs on their campus that integrate learning from distinct areas of study (e.g., those that combine approaches from environmental science and humanities, political science and engineering, philosophy and business, computer science and linguistics, etc.) and the outcomes they had observed. We made a point of reaching out to public universities in every state and minority-serving institutions of all types. We also shared the survey with NHA members and asked 54 scholarly societies representing disciplines outside the humanities to help us disseminate the survey to their members.

The survey ultimately yielded 61 responses. These survey responses clearly indicated that these integrative curricula deepened students' appreciation for a broad liberal arts curriculum. Given that we only sought responses from those who had integrative undergraduate initiatives to share, it is not surprising that our response rate was significantly lower than our national surveys on broader topics. To supplement the survey sample, we combed through relevant publications, conference programs, and lists of projects funded through National Endowment for Humanities (NEH) and Mellon Foundation grant lines to identify additional integrative initiatives. Ultimately, our survey and additional outreach efforts surfaced a wide variety of effective models.

We followed up on these leads by interviewing project directors to learn more about how they had built successful initiatives. For a select number of exemplary initiatives, we established partnerships to survey participating students and learn more about how integrative courses shifted students' perceptions of the value of a broad-based curriculum. The collected data is featured in seven of the twelve case studies below.

## Integrative Approaches to General Education

Gen ed courses are a prime opportunity to persuade students of the value of broad-based liberal arts education. These required courses are typically designed to ensure students complete some coursework in the humanities, social sciences, and natural sciences. Many students take most of their required gen ed courses early in their college experience when there is still time to change direction. However, students frequently wonder how to apply what they learn in gen ed courses to their academic major, their future career, and/or the community where they live. And the fact that these courses are required leads many students to treat them more as a box to check than an opportunity for intellectual growth and discovery. Unfortunately, faculty often approach such courses with a similar attitude, putting less time and energy into teaching them than they devote to smaller upper-level courses that tend to draw students with a preexisting interest in the discipline and subject matter. As a result, a crucial opportunity for turning skeptical students onto the liberal arts is often missed.

The initiatives featured in this section address these challenges in several ways. First, by integrating disparate fields within the liberal arts tradition, they demonstrate what that tradition is all about. Rather than simply telling students that broad-based learning is good for its own sake, these initiatives demonstrate how a multidisciplinary approach to a given topic provides greater depth and breadth of perspective. In other words, students have a chance to experience for themselves how the sum is greater than the parts. Second, these initiatives show students how they can leverage liberal arts disciplines to address real world problems. Third, by integrating the liberal arts with popular areas of study aligned with particular professions (business, engineering, medicine, etc.), these initiatives appeal to students' existing interests and illustrate how a liberal arts education can help them pursue their career goals. Across the board, these initiatives make the most of the gen ed curriculum in terms of both education and advocacy.

## Building an Integrative Liberal Arts Curriculum for Pre-Professional Students

#### Champlain College

Over the past 17 years, Champlain College has built an integrative core curriculum to equip pre-professional students with liberal arts skills. Once known as Burlington Business College, Champlain College now offers a broader range of pre-professional degree programs but does not offer majors in the traditional liberal arts disciplines. However, all Champlain students take a robust liberal arts core curriculum of 12 required courses taught by Core Division faculty trained in integrative pedagogy with backgrounds in a wide variety of liberal arts disciplines. To appeal to Champlain students, many of whom are skeptical of the value of courses outside of the professional training they seek, the core curriculum emphasizes widely valued skills cultivated through the liberal arts rather than specific disciplines and content knowledge. All core courses emphasize experiential and project-based learning as opposed to lectures and exams. Through this integrative approach, Core Division faculty invite students to apply liberal arts skills to the professions and issues that interest them, helping them to better appreciate the personal and pragmatic value of the liberal arts.

Champlain's core curriculum provides a model for developing integrative gen ed courses that demonstrate the value of the liberal arts to students not inclined to seek such learning experiences. In Fall 2023, NHA partnered with Champlain to survey 676 students about their experience in core courses. After outlining the origins and design of Champlain's core curriculum below, we present student survey data to provide insight into the pedagogical strategies embedded in the core that are helping to persuade pre-professional students of the value of a liberal arts education. Faculty and administrators at more traditional academic institutions can draw inspiration from this intensive effort to meet pre-professional students halfway as they seek to build gateways to the liberal arts for such students on their campuses.

#### **Origins**

In 2007, just before the Great Recession fundamentally shifted students' decision-making about what to study in college in an instrumental direction, Champlain College created a common core curriculum for all students and consolidated humanities and social science faculties into a singular Core Division. The initial, fairly traditional core curriculum explored the self, the other, the West, and the world. "It took about a decade for everyone to settle in," recalled Miriam Horne, who was hired in 2008 as a professor of composition and rhetoric and now serves as assistant dean for adjunct support in the Core Division.

In the late 2010s, Core Division faculty worked to overhaul the core curriculum, launching new courses in Fall 2020. "New faculty who really get it came on board and ran with it," observed Horne. They created a linear sequence of courses, described below, that would enable students to advance more in their capacity to leverage liberal arts skills and methods to achieve their personal and professional goals. "Core Division faculty are not teaching their disciplines/specialties or trying to convert students into scholars in their field," Horne noted. At the same time, Core Division faculty communicate that the diverse content they integrate into these courses is grounded in particular disciplines that contribute to our understanding of the world. "We're very intentional about identifying each academic source in the integration," Horne said. Rather than focus on exposing students to the liberal arts through survey courses organized around broad topics, the new curriculum encourages students to experiment with different epistemologies, theories, and methods grounded in the liberal arts to deepen their understanding of specific topics of interest.

#### **Program Design**

Each Champlain student takes twelve core courses, two per semester over the first three years. Several hallmarks of core courses distinguish them from both more traditional gen ed courses at other institutions and the pre-professional courses Champlain students take alongside them. There are no exams in core courses; all major assignments are project-based. Students begin with more collaborative projects in lower-level core courses and work more independently in upper-level courses and their capstone projects. Rather than teach the core curriculum in a lecture-based format, core courses are capped at 20 students and emphasize discussion, close reading, and group work. And there is a consistent emphasis on experiential learning and embodiment. For example, students worked together to make a canoe in one course, and instructors frequently hold classes outdoors, including walking classes. These distinctive elements signal to students that core courses are not just a hurdle to clear but a holistic learning experience that students co-create and connect to their interests and goals.

Core courses are taught by Core Division faculty, some of whom have additional appointments in preprofessional programs, while others teach only in the core. Core faculty share a commitment to integrative
pedagogy that they approach from a diverse array of backgrounds. There are critical masses of historians and
language and literature scholars, as well as anthropologists, folklorists, environmental scientists,
psychologists, education researchers, and scholars of religion, policy, communications, and media studies.
Many of these faculty's scholarly work is thoroughly integrative in its own right, and often publicly engaged.
Several adjuncts who teach in the program are deeply engaged in community projects and bring relevant
professional experience in addition to training in the liberal arts. For example, one adjunct faculty member is
an artist and scientist whose art and computational biology research connect ecology and evolutionary
science. Other faculty are engaged in more traditional academic research within their respective disciplines
while embracing a thoroughly integrative approach to teaching.

In their first year at Champlain, students take two Navigating courses. In "Navigating Higher Education," students reflect on the purpose of attending college. They engage educational theories, explore the history of higher education, and discuss the rationale for academic expectations they'll be expected to fulfill. In "Navigating Your Information Landscape," students learn how to evaluate arguments and evidence drawn from different disciplines through close readings of various texts. Meanwhile, students complete two First-Year Inquiry courses, one focused on composition and another exploring applied, project-based, and experiential approaches to interdisciplinary learning. For each, students select from a menu of options organized around different topics. For example, the composition courses are titled "Reading, Writing, and [Specific Topic]," with individual sections focused on diverse topics, including banned books, happiness, race, gender, and revolutionary art movements.

In the second year, students take two Foundations courses and two Perspectives courses. The Foundations courses focus on questions of epistemology. "Making Meaning Through Science" facilitates critical thinking about the nature of scientific knowledge, methods, and theories. "Making Meaning Through Culture" explores theories of cultural systems and invites students to experiment with different methodological approaches to analyzing texts and media. In Perspectives courses, students select topics to engage through interdisciplinary research and in-depth exploration of a particular theoretical approach to the topic. Options include human rights, ecology, self-knowledge, ethical decision-making, the creative process, the Constitution, the problem of evil, and gender/race/technology.

Third-year core classes introduce students to field research and methods for analyzing and contextualizing data. Students take two final Foundations courses. "Connecting Place and Identity" encourages students to think spatially, reflecting on how natural, built, and digital environments shape how humans make meaning and construct identities. In "Connecting Past and Present," students think critically about how past events—and the narratives we create to make sense of them—shape our present and future. At the same time, students complete two final methods courses, one on field methods and another on digital methods. Once again, they select the topics they want to research using these methods, such as the supernatural, video games, pop culture, urban landscapes, and the surveillance state.

Through this trajectory, students progress from cementing fundamental academic skills and dispositions in the first year to exploring different epistemologies and theoretical approaches in the second year to experimenting with various methods as they conduct their own research in the third year. This sequence prepares students to complete a senior capstone project that integrates the liberal arts skills acquired through the core with the content knowledge gained through the student's major.

#### Outcomes

In 2023, NHA and Champlain faculty and staff collaboratively designed and implemented a survey to document the impact of core courses on Champlain students' intellectual development and perceptions of the value of the liberal arts. We collected a total of 676 survey responses from students across all seven core courses taught during the Fall semester: "COR 101: Navigating Higher Education;" "COR 102: Reading, Writing and [Specific Topic];" "COR 201: Making Meaning through Science;" "COR 202: Interdisciplinary Perspectives on [Specific Topic];" "COR 285: Integrative Thinking Seminar;" "COR 301: Connecting Place and Identity;" and "COR 302: Field Methods."

#### Shifting Perceptions of the Liberal Arts

Overall, core courses helped shift students' perceptions of the value of a broad-based, liberal arts curriculum; 62% of the respondents agreed that the experience made them want to take a wider range of classes that explore a variety of subjects from different perspectives. A first-year student enrolled in "Navigating Higher Education" elaborated, "[It] has shifted my fundamental worldview on how society and higher education function. Everything feels a lot more interconnected now, and I can see how different parts of the world are much more interconnected than I had previously thought." Another student in the course noted that "the multidisciplinary nature of my core class helped me realize that going to college is for so many other reasons than just getting a job, but becoming a more well rounded person and productive member of society."

Students appreciated how core courses forefront questions of meaning and emphasize project-based learning over more traditional forms of assessment. A game production management major taking first-year core courses shared:

Core courses have a unique perspective on work. My core courses did not seem to be focused too much on workload but meaningful work, which is something I think some of my past courses and major-specific courses haven't fully understood. Core courses did a pretty good job at making the work more meaningful than others.

Students also recognized how the liberal arts skills cultivated through the core could enhance their experience of their pre-professional majors. A game design major observed, "My core classes ... help me think about my major classes through different lenses and help me really break down the information I'm getting and analyze them to the fullest." Moreover, students further along in their studies appreciated how the sequence of core courses built upon one another. A game art major in "Connecting Place and Identity" wrote:

I can easily connect [this course] to "Navigating Higher Education" based on the fact that it analyzed text in the same way and allowed me to view the world in a broader sense, thinking about the ways I absorb and make knowledge. Together, these courses let me consciously make meaning and connections with the world around me.

Finally, students noted how core courses helped them gain insight into their educational process, take ownership of it, and tap into their intrinsic motivations, as this business administration student in COR 101 observed:

I was able to think about how I learn and why I learn the way I do. Not just in this course but in all of my courses. [T]his course really drove home the ideas about what higher education is supposed to be for someone and how they can fully achieve what they want out of a college education.

These responses illustrate how core courses' integrative, skills-oriented, project-based approach helped students connect their various educational experiences rather than seeing the requirements as disconnected hoops to jump through.

#### Illustrating the Professional Value of the Liberal Arts

Champlain College's core helps students see how they can apply liberal arts skills in their careers by (a) teaching students research skills through topical seminars students select based on their interests and (b) facilitating opportunities to apply these skills to deepen insight into the profession they are pursuing through their major. A majority of respondents agreed that the course(s) they took helped them see how knowledge and skills gained through the core can be applied outside the university (69%) and help them in their careers (64%).

Students framed their takeaways concerning the professional value of the liberal arts in both general and specific terms. A game art major taking 200-level core courses shared, "The writing and critical thinking required of core courses is essential for developing a well-rounded skillset. Regardless of major, everyone will need to write after college, in any job." And a computer science major wrote:

While COR-101 has absolutely nothing to do with computer science, I feel like it has brought more into the light different non-technical skills I might need, regardless of my future career. My career is unlikely to be strictly technical and as such, the skills I should build throughout my undergraduate education should also extend beyond simply technical.

Others pointed to more specific applications within their chosen career field. The connections were abundantly clear to students preparing for careers in media production. For example, a filmmaking major reflected, "[My core classes] have affected the way I think about the societal and cultural subtext of what goes on in the industry of my major." Students preparing for more strictly technical careers also drew such connections. For example, a second-year computer networking and cybersecurity major wrote:

Core courses have dramatically improved my argumentation and reasoning in regards to ethics, sociology, and cybersecurity. This has improved my ethical decision-making in cybersecurity, will allow me to help change society for the better, and will ultimately make me a better professional in both cybersecurity and mathematics.

These responses illustrate how core courses illuminate the value of broadly transferable liberal arts skills and facilitate opportunities for students to see how those skills will transfer to the specific professional fields they are pursuing.

#### **Learning Outcomes**

At an institution like Champlain, where all students pursue pre-professional majors, liberal learning outcomes from core courses are thrown into particularly stark relief. Survey responses highlighted how these courses prepared students to better understand and work with others from diverse backgrounds. Overall, 86% of the responding students agreed that their experience taking core courses has contributed to their ability to understand people from other cultures, races, or ethnicities, while 78% agreed that their core course(s) have helped them make connections between their experiences and those of others who are different from themselves. And 76% of the responding students agreed that their experience taking core courses has contributed to their ability to have a conversation about controversial issues with someone whose background or views are different from their own.

These are not only crucial social and civic capacities but key career competencies emphasized by employers in national surveys conducted by organizations such as AAC&U and the National Association of Counselors and Educators. As one Champlain student reflected, "[T]his course prepared me to work and interact with others from different cultures. Beyond college, I could deal with countless different things and I'll need to learn how to adapt."

Students' responses to open-ended questions also highlighted how the core curriculum's integrative approach helped achieve these outcomes. One student observed that "the multidisciplinary nature [of core courses] has taught me to understand and respect opinions and stances of others." A game art major taking 200-level Core courses wrote:

Having people from different majors, and subsequently different disciplines, allowed for a much more diverse field of view that we explored within a class. Programmers and social workers bring ideas to the forefront that artists would never have thought of, and vice versa. I fully believe that if core classes were restricted to only groups of people from one major I wouldn't have learned and absorbed as much information from them as I have.

Of course, as any instructor would expect, there were less enthusiastic survey responses that illustrate the challenge of persuading pre-professional students that gen ed courses are as valuable as courses in their major. Nonetheless, survey data illustrate how Champlain's integrative, project-based, experiential approach to gen ed is helping a student population composed entirely of pre-professional majors appreciate and apply the liberal arts. Through an intensive focus on integration, Core Division faculty have found a way to deliver a gen ed experience for students that feels thoroughly connected to, rather than disconnected from, their professional training and lives more broadly.

## Integrating the Gen Ed Curriculum Through Place-Based Learning

#### **Ursuline College**

Ursuline College—a small, women-focused Catholic liberal arts college—created the Rust Belt Pathway, a group of gen ed courses exploring Northeast Ohio history and culture and the region's contemporary challenges and opportunities. The Rust Belt Pathway courses leverage place-based, experiential learning to connect interdisciplinary courses in biology, English, history, philosophy, and photography. Students who complete the pathway receive a Rust Belt Pathway certificate that appears on their transcripts.

This engaging approach is especially prudent at a school like Ursuline; a large proportion of Ursuline students hail from Cleveland and the surrounding area, and 85% of Ursuline graduates stay in the region. A large percentage of students attend Ursuline for nursing degrees, and approximately 50% of students are first-generation. The Rust Belt Pathway demonstrates the value of the liberal arts to this particular student population through a coherent, integrative curriculum that leverages a variety of disciplines to tackle complex problems in the region and improve local communities.

#### **Origins**

The Rust Belt Pathway project began in 2018 with the creation of a new literature course, "From Rust Belt to Revival: Exploring the Legacy of Segregation, Inequality, and Social Justice Through the Lens of the Anisfield-Wolf Canon." Students in the course read books that have received the Ainsfield-Wolf Book Award, which was established by Cleveland poet and philanthropist Edith Anisfield Wolf and named for her father, John Anisfield, and husband, Eugene Wolf, to honor the family's legacy of advancing social justice. It is the only juried prize in the nation for books that confront racism and celebrate diversity. Ursuline faculty leveraged support from the Anisfield-Wolf Book Awards and a Modern Language Association (MLA) Humanities Innovation grant to develop "From Rust Belt to Revival." Former Dean Elizabeth Kavran, English professor Mary Frances Pipino, and Katharine Trostel, associate professor of English and unit chair of the humanities, described the course on NHA's *Humanities for All* blog:

In a Rust Belt city like Cleveland, marred by a history of segregation and uneven decline, these themes are of special significance. The class is committed to the spirit, literature, and activities of Anisfield-Wolf; students read the canon, meet the authors, explore the legacy of the founder, and enliven and contemporize the works through the digital humanities. The class culminates in the creation of a public-facing exhibit. Last year's cohort elected to create a series of podcasts, addressing topics that ranged from redlining to Cleveland's InterlUrban mural project—a city-wide public art initiative spanning our public transit lines whose murals take direct inspiration from Anisfield-Wolf award-winning texts.

In 2019, Ursuline faculty secured an NEH Humanities Connections grant to build upon the course by creating a comprehensive gen ed pathway. They launched the Rust Belt Pathway in Fall 2020, focusing on inequity in Cleveland. Ursuline's campus is in Pepper Pike, Ohio, an affluent, predominantly white suburb recently listed among *Forbes'* 200 richest cities in the U.S. Many Ursuline students experience a stark contrast daily as they

commute from Cleveland to campus. Kavran, Pipino, and Trostel wrote about how the pathway addresses this dissonance on the *Humanities for All* blog:

Through the pathway, whose design was guided and shaped by the voices of community organizations in partnership with faculty and staff expertise, students cultivate the skill sets that allow them to be cultural problem-solvers; they are the citizens who will help to write the next chapter of Rust Belt revival. As an institution, we are uniquely poised to bridge the gap between our campus and its surrounding urban fabric. In a recent article, Forbes ranked Ursuline number one in the nation for student mobility. And, while classrooms at Ursuline are often deeply divided—politically, racially, socio-economically—we have found that conversations that center creative production can bridge divides.

To realize their vision and maximize its impact, Ursuline faculty and administrators mapped the new curriculum onto the existing gen ed structure. With support from the grant, they enlisted faculty from art, biology, history, and philosophy to develop additional courses in collaboration with project directors. By creating a gen ed pathway, they made it possible for every Ursuline student, even those singularly focused on earning nursing degrees with little room for electives, to experience how the liberal arts can enrich their lives and communities.

#### **Program Design**

To earn the Rust Belt Pathway certificate, students take five courses, all of which are grounded in Cleveland and fulfill gen ed requirements: "From Rust Belt to Revival" (English, see above), "Ordinary Women in World History" (history), "Bioethics" (philosophy), "Human Environment" (biology), and "Digital Photography" (art). These are in addition to two core courses that also dovetail with the themes emphasized in the pathway: a writing-intensive capstone focused on values and social responsibility and a seminar entitled "Identity, Diversity, and Community."

Through these courses, students learn to apply a variety of disciplinary approaches to address problems in the region. In "Bioethics," students use evidence and data to assess public health challenges in Northeast Ohio and propose ethical solutions, identifying causative agents, ramifications, and barriers to change. In "Digital Photography," students document and critically analyze the distinctiveness of Cleveland's neighborhoods. In "Ordinary Women in World History," students collect oral histories from women leaders and activists in the Cleveland region, situating these stories in a global context. In "Human Environment," students explore the architecture of Cleveland and craft stories about place and space. In "Identity, Diversity, and Community," students wrestle with local social justice issues such as redlining, access to healthcare, and environmental racism. Rust Belt Pathway founders Kavran, Trostel, and Pipino explain, "These challenges highlight the importance of locally rooted practices of storytelling—both to expose and examine the issues that face our region and to gather the evidence necessary to construct a different future."

Ursuline created the Rust Belt Repository to house student-generated products from pathway courses, including data visualizations, podcasts, and digital recordings of interviews. These materials can be used in future courses and digital exhibitions.

The experiential learning and community engagement components of the curriculum are enriched by the wider work of the Rust Belt Humanities Lab, which connects faculty and community leaders working to find

creative solutions to local problems. One example of a participating organization is the Rust Belt Fibershed, which works to create a "bioregional textile community" of organizations within 250 miles of Cleveland. Through engagement with such organizations, students discover a variety of ways they can address social, environmental, and economic challenges in the region.

#### **Outcomes**

In the Fall 2023 semester, NHA partnered with Ursuline College to survey students enrolled in the "From Rust Belt to Revival" and "Bioethics" courses. We received a total of 20 responses. Most of these students identified as female (80%), first generation (67%), and non-humanities majors (80% of those who reported a major); 40% identified as Black/African American. The vast majority (95%) of respondents said that the main reason they took the class was to fulfill a general education requirement.

Students testified how the courses shifted their perceptions of the humanities and social sciences; 94% of the respondents agreed that their course helped them see how knowledge and skills gained through the humanities and social sciences can be applied outside the university. In particular, nursing students noted that they feel better equipped to launch their careers and navigate ethical challenges in their work. One student wrote, "This course has translated significantly to my career in the nursing field, as I am going to face a multitude of ethical dilemmas in the future."

Respondents overwhelmingly agreed their Rust Belt Pathway course had helped them to engage diverse members of their community. Ninety-four percent agreed that their course helped them make connections between their experiences and those of others different from themselves. They also agreed that their course contributed to their ability to understand people from other cultures, races, or ethnicities (93%) and have a conversation about controversial issues with someone whose background or views are different than their own (93%).

Students elaborated on these data points in their responses to open-ended questions. "It has taught me how to empathize with those who are from different backgrounds, and it has also shifted my perspective on Indigenous people," wrote one student. Another student reflected:

I learned how to have [conversations about] controversial and hard topics with peers and not be uncomfortable but rather look forward to understanding other people's thought processes and their views and beliefs. Reading the books and discussing them in class is what facilitated this growth.

Finally, students reported that the courses helped them to forge deeper connections to their communities and see the region in new ways; 72% of respondents agreed that their course made them feel more connected to the Rust Belt region. One student observed, "I think [this class] made me realize Cleveland has so much more to it than I thought it did." Another student noted, "This class did make me see how important Cleveland and the Rustbelt are for education and many authors."

Overall, these survey results show that the Rust Belt Pathway courses positively impacted students, who came away from them with broadened perspectives on their peers, their future careers, and the local region. In this way, the Rust Belt Pathways program makes the most of opportunities in the gen ed curriculum to demonstrate to students the many ways they can leverage the liberal arts to make positive changes in their communities.

#### **Future Directions**

The success of the Rust Belt Pathway has enabled Ursuline faculty and staff to earn more funding to enhance and expand the program. Ursuline was recently awarded a three-year, \$100,000 grant from the Teagle Foundation and the NEH as part of their joint Cornerstone initiative. Grant funds will support a project entitled "Rhetorics of the Rust Belt: Framing Cleveland through transformative texts," which will enable faculty to redesign two core composition courses that 70% of Ursuline students are required to take. Trostel explained:

We're building off this success to restructure these courses to add new context and pride to Cleveland's history while creating a unifying experience for our students. ... The new course structure will help them write effectively from within and about their region using a language that is both rooted in place and history.

At the same time, Trostel and her colleagues continue to build bridges to local institutions to further enhance the project and share all that they have learned with the community. They also recently earned another MLA grant, entitled "Towards a Rust Belt Humanities Ecosystem," that will fund events to foster collaboration with colleagues at Cuyahoga Community College and Teaching Cleveland, which supports place-based learning in the region.

The growth and expansion of the Rust Belt Pathway project illustrate how taking relatively small steps toward curricular innovation can build momentum and resources toward much bigger projects; in this case, a single course development project leading to the revitalization of the entire gen ed curriculum, as well as a plethora of mutually beneficial partnerships. More specifically, the project shows how place-based, experiential learning can showcase the value of the liberal arts for students, institutions, and communities.

## Collaborating to Offer Applied Liberal Arts Gen Ed Courses to STEM and Business Students

#### University of Pittsburgh

Area studies centers and humanities and social science departments at the University of Pittsburgh have collaborated with its schools of computer science, engineering, and business to offer enticing gen ed courses and programs that demonstrate the value of the liberal arts for these professional fields. Two examples are discussed in this case study:

- 1) The English department partnered with the School of Computing and Information to create a popular Digital Narrative and Interactive Design major that has attracted more students to English through gateway courses that fulfill gen ed requirements.
- 2) The Center for Russian, East European and Eurasian Studies and the Asian Studies Center launched the Water in Central Eurasia initiative in collaboration with the Swanson School of Engineering and the College of Business Administration. The heart of the project is a sequence of integrative courses that examine issues surrounding water sustainability and equitable access in Eurasia in the past (history), present (political science), and future (business).

Survey responses from students enrolled in courses affiliated with the Digital Narrative and Interactive Design major and Water in Central Eurasia project illustrate how these integrative initiatives are shifting students' perceptions of the applicability of the liberal arts and the value of a broad-based curriculum.

#### Digital Narrative and Interactive Design

Like many English departments around the country, the English department at the University of Pittsburgh (Pitt) suffered a steep decline in majors in the wake of the Great Recession of 2008. The department adapted by collaborating with other schools to create innovative programs and courses that draw clearer connections to appealing career fields, including a major in Digital Narrative and Interactive Design (DNID).

The DNID major emerged out of conversations among faculty in English and the School of Computing and Information that clarified how a hybrid major could serve both academic units' interests and support students intellectual and professional development. The School of Computing and Information cannot accommodate all of the students interested in the traditional computer science (CS) major due to high demand. The large number of credits required for the CS major makes it difficult for CS students to take a robust set of humanities courses to compliment the technical skills acquired through the CS major. Moreover, this demanding credit load gives students who had decided to pursue computer science before arriving at Pitt a considerable advantage in the competition for limited spots, making it harder for students who do not come from privileged backgrounds to gain access to computer science. In this context, creating a joint major with a smaller number of requirements enabled both the English department and the School of Computing and Information to serve more students. The DNID was launched in Fall 2019 following a two-year pilot and attracted 24 majors within a year. Since then, it has grown steadily each year. By Spring 2023 there were 160 DNID majors.

Crucially, the department has aggressively sought gen ed certification for intro-level courses offered through the DNID program. These gen ed courses serve as gateways to the majors, exposing students to the program when they are still early in their undergraduate careers. In Fall 2022, we surveyed 63 students enrolled in a selection of gen ed DNID courses—"Composing Digital Media," "Intro to Game Studies," "Integrating Writing and Design," "Narrative and Technology," "Digital Humanity," "Intro to New Media," and "Visual Literacy"—to examine how they helped to shift students' perception of the value of the liberal arts.

First, survey data illustrate how these courses' forefronting of professional skills and issues surrounding technology make them an easier sell to students who are skeptical of the professional value of the liberal arts. Sixty-nine percent of respondents reported that the primary reason they took the course was to fulfill a gen ed requirement (referred to henceforth as "gen ed students"). A majority of these students had declared STEM or business majors.

Second, survey data demonstrate how these courses shift such students' perceptions of the pragmatic value of the liberal arts. More than 80% of these gen ed students indicated that their course helped them understand how knowledge and skills gained through liberal arts courses can help them in their careers, and more than 75% indicated that it made them want to take more liberal arts courses.

Students elaborated on how the integrative approach in these courses helped shift their perceptions of the value of the liberal arts in their responses to open-ended questions. "I believe it helped me further refine my writing skills by focusing on topics that interested me," a data science major wrote. A computer engineering

major noted, "I enjoy computer science more, so applying computer science to English has made me appreciate English more. I think I've diversified my skill set; rather than only computer science skills, I now have some [general] skills that will appeal to employers." And a DNID major observed that her course "made me appreciate the importance of having both ... with the emphasis on STEM, it is easy to forget how humanities hold so much value in our everyday lives. Neglecting [the humanities'] impact is only harmful to society."

In addition to DNID, Pitt English has created majors in Film and Media Studies and Public and Professional Writing (PPW) in collaboration with five associated departments: French & Italian Languages and Literatures, Hispanic Languages and Literatures, History of Art and Architecture, and Slavic Languages and Literatures. More broadly, the department has worked to introduce applied courses that integrate professional training. For example, students in the department's Literature and PPW majors now take courses such as "Critical Making," "Media Ecology," "Composing Digital Media," and "Professional Uses of Social Media." Collectively, these integrative initiatives have helped the department fully recover from a 50% decline in majors in the wake of the Great Recession to restabilize at around 650–690 total majors per year.

#### Water in Central Eurasia

The integrative course sequence at the heart of the Water in Central Eurasia project consists of three courses housed in different departments: "Water Past: Climate Change in the Pre-industrial Era" (history), "Water Present: Engineering in the Industrial Post-Empire" (political science), and "Water Future: Encounters in the Anthropocene" (business). Through these courses, linked experiential learning opportunities, and co-curricular programming, the project demonstrates how a deep understanding of regional history and culture is essential to solving complex problems. Furthermore, the project offers a model for multi-level outreach to promote such applied liberal arts offerings to students enrolled in pre-professional schools.

The Center for Russian, East European, and Eurasian Studies (REEES) and the Asian Studies Center (ASC) were inspired to collaborate on the project by the NEH Humanities Connections grant line, which supports efforts to connect the humanities to other areas of study through undergraduate curricula. "The centers' leaders identified the NEH Connections grant as an opportunity to build a curriculum that is embedded in an area studies mission while drawing in students from throughout the university," recalls Ruth Mostern, director of the World History Center and an advisor on the project. "We began brainstorming about what we could do that was interdisciplinary that could build on emerging connections with the business and engineering programs; water emerged as a natural direction [in light of available expertise]."

Nancy Condee, the director of REEES, explained how the project sought to deliver a more engaging gen ed experience and demonstrate the pragmatic value of the liberal arts to pre-professional students.

In contrast to the traditional model of a liberal arts curriculum that uses gen ed requirements to ensure students take varied, yet often unconnected, courses from areas outside their majors, this initiative offers the model of a holistic education for the twenty-first century through a humanities-focused interdisciplinary investigation of a real-world issue.

From the earliest stages, project leaders worked to establish partnerships that would elevate the program and help make it sustainable beyond the grant cycle. They presented the initiative to senior university leadership in the Office of the Provost, the Office of Student Affairs, the three participating schools (arts and sciences, business, and engineering), and the Honors College, securing broad buy-in for the project.

These partnerships helped different types of students chart pathways through the three-course sequence. Project leaders worked with partners to gain approval for the courses to fulfill gen ed requirements in all three participating schools. And they reached out to academic and career advisors to solicit their help in encouraging student participation.

Meanwhile, project leaders reached out to students directly to promote the courses. They leveraged grant funds to augment and raise awareness about the project with student-facing events, project-based and experiential learning activities, and opportunities for students to conduct and present research under faculty mentorship. They collaborated with student unions, clubs, and living and learning communities to organize events on water sustainability and environmental activism. They also hired an undergraduate student ambassador to advertise it to students through visits to courses, peer-to-peer mentoring, and tabling at student orientation and engagement events.

As a result of this multipronged outreach effort, more than 80 students enrolled in the pilot sequence of Water in Central Eurasia courses—reaching 85% of the aggregate maximum course capacity—from Spring 2019 through Spring 2020.

Project leaders surveyed participating students to measure their progress on key pedagogical objectives. They reported: "Responses to our entry and exit surveys showed that curricular integration with the humanities has the potential to yield positive educational outcomes overall. Many students self-reported increased proficiency in knowledge in global and regional studies, understanding of interdisciplinary connections, communication, and collaboration skills." For example, students emerged from the course much more confident in their ability to engage in discussion and debates about issues related to Central Eurasia; 91% agreed they possessed this ability in exit surveys (compared to 61% in entry surveys), and only 1% disagreed (compared to 21% before the course).

The initiative's success has reinforced project leaders' sense of the importance of investing in interdisciplinary projects to provide impactful liberal arts experiences to students who face barriers in accessing them. They wrote:

While students are often interested in exploring integrated curricula to enhance their potential for personal, academic, and professional growth, rigid degree requirements [frequently interfere]. The institutionalization of interdisciplinary curricular pathways promises unique opportunities for demonstrating the value of studying the humanities to a broader audience of students, parents, faculty, and staff.

In this particular case, such courses "encourage students to explore a pivotal area of the world while addressing an issue we know to be of global urgency—the need for clean, sustainable water sources—with humanistic habits of mind."<sup>5</sup>

Taken together, the Digital Narrative and Interactive Design major and the Water in Central Eurasia initiative present Pitt students enrolled in engineering, business, and computer science programs with accessible, engaging opportunities to experiment with how the liberal arts can enrich these fields. And they demonstrate to all students how the liberal arts can be applied to pressing problems and professional challenges.

<sup>&</sup>lt;sup>5</sup> Nancy Condee, Zsuzsánna Magdó, and Ruth Mostern. "Humanities-Centered Curricular Innovations: Lessons on Integrated Learning from the University of Pittsburgh's Initiative Water in Central Eurasia." August 2020.

#### **Profiles**

Students at **Saint Louis University** complete Collaborative Inquiry capstone courses towards the end of their undergraduate careers. These courses—which can be team taught or led by an individual faculty member—provide opportunities for students to explore "complex questions without straightforward answers." Students are encouraged to find "multidimensional approaches to contemporary societal problems like climate change or racial inequality, or enduring questions concerning topics such as the nature of beauty, effective leadership, or the transcendent." Collaborative Inquiry courses can vary in content and delivery. For example, "The Structure of Poverty: Globally and Locally" is a Collaborative Inquiry course that is cross-listed between international studies, political science, and women and gender studies. It encourages students to look both theoretically and empirically at the root causes of poverty while engaging in service learning projects through the nonprofit Queen of Peace Center. In "True Crime: Forensic and Literary Perspectives," students look at crime from the perspective of forensic science and literary studies, learning both close reading strategies and forensic techniques used in crime laboratories.

At **Scripps College**, students fulfill a portion of their gen ed requirements through the Core Curriculum in Interdisciplinary Humanities. The theme of the entire Core program is "Histories of the Present." It consists of a sequence of three courses that integrate a variety of disciplines to investigate historical and contemporary topics. In the fall semester of their first year, students take a Core I course that is team-taught by 15–18 faculty from across the humanities, social sciences, natural sciences, and applied sciences using a single, unified syllabus that exposes students to different academic perspectives. In the second semester, students take Core II, which further develops the liberal arts knowledge and skills encountered in Core I and deepens students' understanding of the value of distinct disciplinary approaches. Finally, in Core III, students take a writing-intensive course taught by a single professor in which they focus on a more specialized topic and work on independent research and projects. A student interested in medicine and health might take in their second semester "The Art of Medicine, Medicine in the Arts: The Body in Italian Literature," and then follow up on those themes in the following semester in "Embodying Illness."

Rollins College has a unique general education program called the Rollins Foundations in the Liberal Arts (RFLA). Students take holistic foundational courses that forefront liberal arts skills applicable to all majors, including critical thinking, research, analysis, and problem-solving. Foundational courses draw on disciplinary approaches from across the liberal arts and are designed to be taught by humanities, social science, and natural science faculty interchangeably. Students select from a menu of courses framed around big topics, drawing connections over different historical periods and regions of the world. For example, first-year courses include "Sex, War, and Plague," which tracks connections between these topics from the premodern to the postmodern, and "Panics, Crashes, and Pandemonia," which connects human experiences of economic crises from the Dutch tulip mania of the 17th century to the current housing crisis. Students take a coordinated sequence of courses through which each course builds on prior skills to advance their intellectual development.

At the **University of La Verne**, the First Year La Verne Experience (FLEX) program creates learning communities by allowing freshmen to select concentrations that integrate two classes on the same theme from two different disciplinary perspectives. For example, students who select the "Bones, People, and Their Stories" FLEX concentration take "Intro to Biological Anthropology" and "News Reporting" simultaneously, drawing connections between them. Another Flex concentration, "The Intersection of Literature and Psychology," combines "Literature & Psychology" and "Principles of Psychology." Joseph Cabrera, interim

vice provost for undergraduate programs and faculty affairs and director of the FLEX program, reports that this integrative first-year experience has led to greater retention and persistence toward degrees.

The **Community College of Baltimore County** (CCBC) created contextualized writing courses with support from the Mellon Foundation and the Community College Humanities Association. These courses demonstrate the value of humanistic thinking for STEM, pre-allied health, business, law, and performing arts students by critically analyzing writings associated with these fields. CCBC also leveraged grant funds to infuse parts of the humanities curriculum into non-humanities disciplines such as nursing, education, psychology, environmental science, biology, engineering, business, and computer science. Teams of professors from these disciplines work together to stress the importance of a humanities approach to all academic areas through pedagogy and curriculum design. Through these efforts, CCBC students who may not be inclined to seek out humanities courses are nonetheless experiencing how the humanities help prepare them for their future professions.

## Integrative Degree Programs

The initiatives featured in this section integrate a range of disciplinary approaches into a single curriculum that leads to a major, minor, or certificate. One of the primary reasons that many traditional liberal arts disciplines have struggled to attract majors in recent years is that students have increasingly selected degree programs that seem like straightforward credentials for a specific career over more broadly framed disciplines that lack such a direct connection. By combining forces to create applied liberal arts programs related to particular professions and topics, faculty can clearly signal the pragmatic value of the liberal arts and thus attract more instrumentally-minded students. As we see in the case studies below, students in these applied programs often come to appreciate the contributing disciplines in their own right.

We have divided the integrative degree programs in this section into two categories: (1) programs that orient liberal arts study toward a particular profession and (2) programs framed around understanding a pressing problem and exploring potential solutions. Of course, every profession has its big problems, and there are careers devoted to solving every societal-level challenge. Thus, the organizational logic is based less on a pedagogical distinction than on "the pitch" to students embedded in the formal presentation of the program. Programs in the first category appeal to students preparing for particular professions (e.g., medicine), while those in the latter appeal to those motivated by a major social challenge, (e.g., climate change).

The programs featured here vary a great deal in their structure, content, and scale. Some are stand-alone programs or departments, while others are cobbled together on a shoestring budget using affiliated faculty. They prepare students for careers such as entertainment, entrepreneurship, and medicine. And they address issues such as climate change, sustainable food production, and technology and ethics. These programs operate on widely varying scales, from small programs housed within individual departments to large initiatives that bridge multiple schools on campus. Collectively, they illustrate the numerous possibilities for creating applied programs that demonstrate how the liberal arts empower students to pursue their particular goals.

#### PROFESSION-ORIENTED

#### Building Bridges to Philosophy Through an Interdisciplinary Applied Ethics Minor

#### Le Moyne College

With an NEH Humanities Connections grant, the philosophy department at Le Moyne College created a minor in Ethics, Values, and Professional Life (EVPL) that has succeeded in motivating students, particularly those pursuing STEM and pre-professional degrees, to take additional liberal arts courses that apply the tools of philosophical ethics to profession-specific dilemmas. Since the minor launched in Fall 2020, 20 students have completed the minor, a strong start at an institution with fewer than 3,000 undergraduates. Moreover, the department's efforts to collaborate with pre-professional faculty to offer applied ethics courses of clear, pragmatic value to their students led several pre-professional programs to adopt applied ethics requirements. All majors within Le Moyne's Madden College of Business and Economics now require an applied ethics course offered through the program, as do additional degree programs outside the business school, including cybersecurity and global affairs. As a result of this extensive effort to integrate philosophical ethics with pre-professional education, more and more Le Moyne students are benefiting from a rigorous liberal arts approach to the ethical quandaries they will encounter in their personal and professional lives.

#### Origins

In 2018, philosophy professor Irene Liu, who was then serving as chair of the department, spearheaded a successful application for an NEH Connections implementation grant to develop an applied ethics curriculum in collaboration with pre-professional departments. Liu reflected on the context and rationale that motivated the proposal:

Our most popular majors are pre-professional. Philosophy has never been popular as an actual major, but [we] have traditionally had a lot of minors in our department. The core curriculum has traditionally been based in humanities departments, but the core curriculum changed around a decade ago and the humanities departments lost ground. That ended up affecting the philosophy department in terms of both minors and enrollments. So our goal for this project was to demonstrate the importance and relevance of philosophy to students, faculty, and administrators outside of the philosophy department.

Through the grant, the philosophy department cultivated collaborations with other departments through three main strategies. First, they incorporated existing required ethics courses into the new EVPL minor. For example, since an existing communications ethics course required of all communications majors now counts towards the EVPL minor, these students are one step closer to the minor and thus more likely to complete it. Second, they worked together with pre-professional faculty to collaboratively design new, thoroughly interdisciplinary, profession-specific applied ethics courses. This helped philosophy faculty efficiently incorporate domain-specific knowledge they lacked into the new curriculum and increased buy-in from pre-professional faculty. Through the collaborative process, pre-professional faculty not only developed a sense of

ownership over the courses but engaged more deeply with philosophical ethics themselves. Third, the philosophy department hosted faculty workshops on teaching ethics where they shared the approaches they had developed in ethics and moral philosophy courses. These workshops helped other faculty on campus develop more comfort with facilitating conversations about ethics in their courses, as well as to better appreciate the rigor of philosophical ethics.

Liu described the challenge of gaining buy-in as less about overcoming resistance than persuading colleagues that both philosophy and pre-professional faculty had unique expertise concerning ethics that students really needed:

A lot of faculty outside of the philosophy department think they're already on board. They think, 'Oh, we already do that.' Many of the things that humanists have to offer, people from other departments will readily recognize as good, but they don't necessarily recognize that we have skills and methods to teach these things that they don't have. ... What we were able to do was to change the culture and change how people perceived the philosophy department and ethics in general.

Pre-professional faculty often teach courses on contemporary standards of compliance within a given profession in light of historical controversies. When such courses are framed as ethics courses sufficient to fill a university or program's ethics requirement, students are steered away from opportunities to obtain a broader and deeper understanding of ethics through philosophy. By demonstrating the unique contributions of philosophical ethics, Le Moyne philosophy faculty persuaded pre-professional faculty that their students need both types of courses.

Meanwhile, philosophy faculty conducted an outreach campaign to raise awareness about the initiative and cultivate support from key stakeholders. To reach students, they developed a website and social media content and visited related courses to promote the minor. They hired a student-led marketing firm associated with the business school's marketing program to create an EVPL marketing campaign. They contacted advising staff and department chairs across the college to encourage them to recommend the minor to their students. And they worked to articulate the value the minor could add to the overall curriculum to the provost, deans of Le Moyne's colleges, and the office of institutional advancement. They cultivated relationships with donors seeking to develop Le Moyne's new risk management and insurance program and convinced them to incorporate applied ethics instruction into their curricular vision. As a result of these efforts, the department was able to secure upper administration's approval for a new tenure-track hire to meet the increased demand for applied ethics courses and further develop the EVPL curriculum.

#### **Program Design**

To earn the EVPL minor, students must complete five courses. Two are already required as part of the core curriculum: "Introduction to Philosophy" and "Moral Philosophy." Thus, students only need to take three additional courses to earn the minor. They select two 300-level philosophy courses from a list of ten options that include a mix of traditional philosophy courses related to ethics (e.g., "Philosophy of Law," "Happiness," and "Meaning in Life") and interdisciplinary applied ethics courses created by philosophy faculty (described in greater detail below). Finally, students choose another upper-level course, either from philosophy or from a list of courses that embody the Jesuit educational tradition Le Moyne carries forward. These include courses from the core curriculum, religious studies, theology, and peace studies with an overarching emphasis on

social justice. Through this structure, students are drawn into a minor that is thoroughly grounded in the discipline of philosophy through a variety of entry points.

As it developed the minor, the department outlined a formal definition of applied ethics courses so that course aims would be clear to students and consistent across a growing catalog of EVPL courses:

As a branch of the philosophical study of ethics, Applied Ethics is the systematic investigation of philosophical assumptions that underlie real-world ethical decisions and policies. This field of study focuses especially on areas of controversy and concern in contemporary public life, including business, the environment, health care, engineering, technology, the family, and so forth. The ultimate goal of Applied Ethics is to produce a reflective, critical understanding of the philosophical assumptions operative in these controversial areas. It accomplishes this goal by explicitly identifying the norms and values that can guide decisions and policies in these areas, and to the extent possible, by characterizing the rational justification upon which those norms and values rest.

Since the first applied ethics course was offered in the 2020–2021 academic year, Le Moyne philosophy faculty have steadily built out the curriculum with additional courses and more frequent offerings. As of Spring 2024, six interdisciplinary applied ethics courses have been developed in collaboration with preprofessional faculty: "Environmental Ethics," "Ethics and Public Policy," "The Virtues of Good Business," "Ethics of Medical Technology," "Data, Privacy, and Computing Ethics," and "Crisis Ethics: War, Pandemic and Social Collapse."

#### Outcomes

The interdisciplinary applied ethics courses developed for EVPL are capped at 20 students and virtually every section offered to date has been filled to capacity. A total of two applied ethics courses were offered each of the last three academic years. The department plans to offer four such courses during the 2024–2025 academic year and expects the number to continue to increase from there, particularly in light of the Madden College of Business requiring all majors to complete an applied ethics course. This brings all business majors one step closer to completing the minor. Moreover, collaborative efforts are underway to encourage all business students to complete a minor in either EVPL or philosophy. McNeil Assistant Professor of Applied Ethics Joseph Spino elaborated on these plans: "with the business school requirements coming 'online' soon, we anticipate needing to offer about seven courses each year moving forward, maybe eight. So we expect that, each year, around 140–160 Le Moyne students will take an applied ethics course." In the context of a small liberal arts college, this constitutes a substantial contribution to the overall curriculum.

Meanwhile, there has been a steady increase in the number of EVPL minors. In the program's first year, there were eight total philosophy minors, including the first two EVPL minors. By the second year, the total number of minors grew to 14, with 6 EVPL minors. By the third year, there were 27 total philosophy minors, with 16 EVPL minors. This growth is helping the philosophy department recover from declines in minors and enrollments suffered in the wake of the 2008 financial crisis amidst a reduction of its core curriculum footprint. Crucially, the growth pattern suggests that rather than compete with the traditional philosophy minor, the introduction of EVPL has dovetailed with an increase in philosophy minors, including individual students who complete both minors. As a result of this rising tide, the philosophy department has hired yet another tenure-track philosophy professor to help carry the growing teaching load.

Philosophy faculty's outreach to donors through the project also resulted in funding for a yearly student ethics prize of \$500 that is helping to raise the profile of ethics research and highlight students' work. And they have been exploring the possibility of a dual business/philosophy major with the business school. Regardless, the fact that philosophy faculty are now teaching required courses across all business programs, among other popular pre-professional majors, is a huge boon to the department. "Our classes are fuller now," Liu observed. "Before, our classes were not filling, and they would be canceled."

Most importantly, more and more Le Moyne students are being equipped with the tools of philosophical ethics to (1) think critically about the values motivating their chosen professions, (2) more deftly navigate the complex ethical challenges they will face in their careers, and (3) better appreciate how Le Moyne College's liberal arts curriculum supports their personal and professional development. In these ways, EVPL's integrative liberal arts curriculum is educating students who can not only secure jobs but are also well prepared to address the myriad complex ethical challenges they will face throughout their lifetimes.

## Creating a Certificate in Spanish for Health Care and Human Services

#### Ramapo College

The Spanish department at Ramapo College created a certificate program in Spanish for Health Care and Human Services that is motivating students to take additional language courses, equipping them with highly valued professional skills, and preparing them to address inequities in healthcare systems. Launched in 2017, the certificate program has attracted more students each year; by spring 2024, there were 40 students enrolled in the program. Moreover, the certificate program has helped the department attract more majors and minors, both directly, as many certificate earners go on to pursue a minor or even a second major, and indirectly, as the initiative shifts students' perceptions about the value of language study. From Fall 2018, the semester when students first enrolled in the certificate program, to Spring 2023, the number of minors more than tripled, while the number of second majors increased by 150%. In this way, Ramapo's Certificate in Spanish for Health Care and Human Services illustrates how developing curricula that serve the language needs of professions can help students appreciate how taking additional liberal arts courses can enrich their lives and careers.

#### **Program Design**

The certificate curriculum equips students with concrete skills that enable them to promote equity and inclusion in various work environments. First, students attain the oral and written proficiency necessary to compile a medical history or conduct a human services assessment in Spanish. Second, they become familiar with the ethical codes that guide medical interpreters. Third, students learn how clients' various identities intersect, and the role language plays in those intersections. More broadly, students cultivate cultural competence, beginning with a sense of cultural humility.

The certificate, which appears on students' transcripts, requires students to complete Spanish Intermediate II or test out with equivalent proficiency. Students must also take a core course, "Spanish for Health Care

and Human Services Professionals," and two electives, one of which they can fulfill with an internship. With the help of two Undergraduate International Studies and Foreign Language (UISFL) grants from the U.S. Department of Education, the department established two new internships with local health providers and created three new elective courses: "Medical Interpreting," "Bilingualism in Social Services," and "Human Services in the Basque Country," a study abroad program. These courses not only provide students with advanced language skills and expertise regarding how to use them in medical settings but also with robust liberal arts experiences in fields like narrative medicine, the history of medicine, and bioethics.

Importantly, Ramapo Spanish faculty, led by program director and professor of Spanish Natalia Santamaria-Laorden, have worked to build gateways to the program. First, they quickly secured as many gen ed certifications for certificate courses as possible. They also created a first-year seminar to introduce incoming students to the certificate program. And they held three symposia on diversity in health care and human services that raised awareness about the disparities, logistical challenges, and ethical issues that students can help address using the language skills and cultural competencies gained through the certificate program. Santamaria-Laorden and her colleagues also built relationships with the advisors who serve students in aligned programs—such as nursing and social work—and equipped them with resources to articulate the benefits of completing the certificate to prospective students. Finally, they connected with Ramapo's Educational Opportunity Fund Program, which supports students from disadvantaged educational backgrounds, to expand access to the program.

#### Outcomes

In Spring 2023, NHA partnered with Santamaria-Laorden and her colleagues to survey 11 students who had completed the certificate to learn more about their experiences in the program. Eighty-nine percent were students of color, 78% were Latinx, and 55% identified as first-generation students. A large majority (78%) indicated that they are enrolled in the nursing program, one of the most popular on campus.

Survey data demonstrate how integrating language instruction and medical training helped shift students' perceptions of the value of studying languages and cultures. When asked about their changing perceptions in a direct, open-ended way, students unanimously responded in the affirmative (except for one student who indicated they had already held language education in high esteem). Respondents emphasized that they now appreciate how language skills in healthcare settings can save lives. A first-generation Latina nursing student reflected: "This certificate changed the course of my future career. Even though I spoke Spanish I never saw it as a superpower in my career, but this certificate made me see how valuable it is and how to sharpen my skills to be used properly." Across the board, 100% of survey respondents agreed that the certificate helped them see how knowledge and skills gained through liberal arts courses can help them in their careers. And 100% agreed that it helped them see how knowledge and skills gained through the humanities and social sciences can be applied outside the university.

Survey data illustrate how the certificate program motivated these students to take more language classes than initially intended. Seventy-three percent of respondents said they had not planned to take additional language courses beyond those required through gen ed before encountering the certificate program. Moreover, 60% of these students went on to complete a Spanish minor or major. Clearly, experiencing language instruction that demonstrates the value of such skills for one's chosen profession motivated these students to make more room for language study in their undergraduate curriculum. Moreover, 100% of survey respondents agreed that their experience in the certificate program made them want to take a broader range of classes that explore a variety of subjects from different perspectives.

Students described their motivations for completing the certificate program in both personal and professional terms. "I want to go into the medical field, so I believe completing [the certificate] will give me an edge over others," wrote one first-generation Latinx student. Another student emphasized how she "wanted to learn how to be able to help people who did not speak English. There are so many cases that have shown Latinos being wrongly diagnosed in hospitals due to not having a proper translator." One student even indicated that the certificate program had motivated their decision to attend Ramapo "because [they] knew [they] could get an education beyond nursing."

Through Sanatamaria-Laorden's leadership, the impact of Ramapo's certificate in Spanish for Health Care and Human Services is reverberating beyond the campus. Energized by the experience of creating the certificate and its outcomes, she began reaching out to like-minded colleagues on other campuses to help create similar programs. Sanatamaria-Laorden and Alicia Muñoz Sánchez, who manages Spanish instruction at UC San Diego, co-authored *Spanish for Health Care and Human Services: An Interdisciplinary Approach for Intermediate and Advanced Speakers.* Since its publication in 2022, 515 institutions have requested copies to explore developing similar curricula, and 36 institutions have already adopted it. The textbook guides students through realistic communicative tasks, language policies in health care, representation of patients' narratives, and histories of race- and ethnicity-based disparities in healthcare.

More broadly, Santamaria-Laorden has worked with colleagues around the country to promote the value of integrative language programs. As the founding chair of the Language for Specific Purposes Special Interest Group in the American Council of the Teaching of Foreign Languages, Santamaria-Laorden has joined forces with MLA and the International and Foreign Language Education office at the U.S. Department of Education to develop resources to support language departments in expanding their outreach to STEM professionals. Through these efforts, she and her colleagues are working to meet students where they are to persuade them of the value of language study specifically and liberal arts education more broadly.

## Leveraging the Liberal Arts for Careers in Entertainment Pace University

Pace University has created a new B.A. program in Writing for Diversity and Equity in Theater and Media (WDETM) that integrates intensive writing instruction, in-depth exploration of social justice issues through the humanities and social sciences, and training for careers in theater and media. Now entering its third year, WDETM has attracted 25 majors and has more students interested in enrolling than the emerging program can currently accommodate.

#### Origins

WDETM was created with support from the Edmond de Rothschild Foundation in 2021. In contrast to other programs geared toward careers in media, WDETM leverages the humanities and social sciences to empower students to pursue these aspirations. When Assistant Dean for Equity in the Arts S. Brian Jones was hired to launch the new program, he shifted the curriculum from its original design in order to center the liberal arts. "The first thing I did was I added humanities classes," Jones recalled. "I wanted them to have the opportunity not only to develop their voice but to understand the world around them and the stories that

they are telling. So that is at the center of the program." The promotional material for the program highlights opportunities to "embrace the complexity of underlying social and historical issues" through such courses.

To build the new program around a strong sense of community, the program launched with a small, tight-knit cohort of students who quickly bonded over their academic and professional interests. Jones described how exploring diverse cultures and histories through the liberal arts immediately resonated with them in light of their goals:

They already have an interest in the humanities. They're becoming authentic storytellers who say, "I'm going to sit down and write a story about this community and do that research, that understanding, that discovery. I'm not just creating art to make art. I'm creating art to make change, and the humanities are the pathway to change."

#### **Program Design**

Students are required to take 15 courses to complete the major. Three courses were designed for the program: a survey course entitled "Diversity, Equity, and Inclusion in American Entertainment" and two semesters of "Senior Writer's Workshop." In addition to foundational English composition courses required through the core curriculum, WDETM students take six creative writing courses offered by the English and film and screen studies departments. They experiment with different genres of writing and forms of media in these courses, including theater, film, and television. They also take "Introduction to Theater and Theater for Social Change."

Meanwhile, they take four area studies courses that integrate a variety of humanities and social science disciplines to examine the histories of marginalized communities, contemporary disparities impacting them, and theories of how these identities shape individual experience and social life. These include: "Introduction to Critical Race and Ethnicity Studies" (American studies), "Disability in Home and Community" (disability studies), "Gender, Race, and Class" (women and gender studies), and "Creative Writing for Social Justice: Feminist, Queer, and Trans Perspectives" (women and gender studies). Moreover, students must also complete a minor as part of the program and are encouraged to take a deeper dive into one of the areas of study they engage through the WDETM curriculum.

Cohorts of WDETM majors meet monthly to discuss the intersections between the writing, theater, and area studies courses they take. These monthly meetings provide opportunities to incorporate the histories, perspectives, and theories gained through their area studies courses into their creative writing courses, as well as opportunities to apply creative writing skills and techniques in their academic work. In this way, WDETM students constantly make synergistic connections as they integrate these disciplines in their work. "Students' voices need to be at the center of this type of work," Jones noted. "I tell them that these are your meetings. I'm just here to facilitate. They are really bought into having a really rigorous, vibrant discussion."

Meanwhile, students engage directly with working professionals in the field on a regular basis through master classes and field trips to performances and cultural organizations in New York City. These engagements help prepare students for internships with affiliated nonprofit organizations, a major feature of the program. Through these professional development opportunities, students apply the knowledge and skills gained through their liberal arts curriculum in real time. WDETM major A'isha Muhammad reflected on the interplay between the academic work and the professionalizing experiences: "If you value DEI in media ...

then this is the major for you. You're going to learn so many skills and get in contact with so many people and have access to cool opportunities that a lot of other majors don't necessarily have access to."

WDETM students benefit from extensive mentoring from the time they enter the program to graduation. Prospective students meet with Jones to discuss their interests and goals before joining, and they continue to reflect upon them as they evolve in the monthly cohort meetings. As the program gains momentum, peer mentoring propels it forward. Muhammad wrote:

I'm most excited to see the cohorts under us come up because we were in the pilot program. Now we have a full table of people [and] it's really exciting to see freshmen who are able to start out in the major. I hope we're setting a good example for them and getting new and younger voices into the room to contribute.

Finally, the "Senior Writer's Workshop" courses are designed to simulate the experience of being part of a professional writer's room, with students providing feedback on one another's creative projects.

#### Outcomes

The program has successfully attracted a highly diverse group of students by appealing to their personal and professional aspirations. "Even before high school, I knew I wanted to do something in theater or film, something especially centering on identity, specifically Latin American identity and all of its intersectionality," one first-generation Mexican American WDETM major reflected. Speaking about the experience of seeing one's culture represented through theater and media, the student continued, "To have the ability to give that experience to more kids, it just warms my heart and keeps me going."

The program is motivating Pace students to pursue a broader liberal arts curriculum. Muhammad, quoted above, describes being initially drawn to Pace for performance and beginning as a Film and Screen Studies major but then shifting to WDETM for its liberal arts exploration of diversity and identity and focus on screenwriting:

As someone who writes, it's really important to me to have diversity and equity at the forefront of my work. For me, my writing has [helped me to] realiz[e] that, like all my peers, we all have unique voices, and we all have different stories that we want to tell. We are here to create space, and that's one of the many beautiful parts of this major.

The program is also beginning to attract students to Pace. WDETM major Dreana Henry says the program motivated her to apply to Pace in the first place: "I've never actually seen a major that was super focused on diversity and equity all around. I thought it was really interesting that there was a program where I could learn not only how to screen-write, but to write novels too. I had never seen something that was so diverse in that way."

The success of the WDETM program has attracted additional resources and support. Jones secured an additional \$100,000 grant for the WDETM program from the late Dr. Lanze J. Thompson, a graduate of Lubin School of Business, which will support two student scholarships and community and social service programs over the next seven years. These funds will help expand access to the program by easing students' financial burden, as well as facilitate opportunities for WDETM majors to contribute to the marginalized communities whose stories they wish to tell. Less tangibly, the entertainment professionals engaged through the program

are enthusiastic about the high quality of work students can contribute with this integrative, liberal arts training. And they are hopeful that it will translate into professional opportunities as students begin to graduate from the program, providing them with platforms to make positive change in the entertainment industry using the knowledge and skills they've acquired.

#### **Profiles**

The Health and Medical Humanities major at **Misericordia University** "applies humanistic skills—critical assessment, reflective learning, collaborative problem-solving, and effective communication—to issues in healthcare and medicine and with an emphasis on cultural, familial, philosophical, spiritual, and social factors." Core requirements for the major include biology, narrative medicine, medical ethics, and participation in fieldwork or an internship. Students also complete six credits in a Humanities and Medicine track with options such as "Literature and Medicine and the History of Medicine and Health" and six credits in a Critical Health Studies track with options including "Health Disparities and Environmental Health."

The philosophy department at the **University of Louisville** has created a four-course Undergraduate Ethics Certificate to promote to STEM and pre-professional majors. Students who complete the certificate learn to apply the tools of philosophy to thoughtfully navigate ethical decisions in their personal, professional, and civic lives. First, they must take "PHIL 321: Ethics" or "PHIL 521: Ethical Theory." Students then select three additional ethics courses from a list of 20 options. Three quarters of these options are taught by the philosophy department, including a number of applied ethics courses (e.g. "Business Ethics," "Medical Ethics," "Technology and Human Values") and courses introducing students to particular branches of philosophy (e.g., "Political Philosophy," "Feminist Philosophy," "African American Philosophy"). Courses that teach professional codes of ethics and standards of compliance taught by pre-professional faculty (e.g., "Nursing Leadership and Management," "Ethics, Social, and Legal Aspects on the Electronic Frontier") are also counted toward the certificate.

An NEH grant helped the **University of Texas at Austin** establish a popular Patients, Practitioners, and Cultures of Care certificate program, which offers a "transdisciplinary curriculum to explore health, health care, healing, and social justice issues from a rich variety of humanistic perspectives." It is one of the university's 17 interdisciplinary concentrations called Bridging Disciplines Programs. Stephen Sonnenberg, M.D., professor of psychiatry, population health, and medical education, served as principal investigator on the NEH grant and chairs the faculty panel governing the PPCC program. He explained, "Every fall there are approximately 2,000 students on campus who will eventually go on to medical school. I estimate that at least half these 2,000 students will have contact with the program, taking at least one course. And I predict that eventually close to 65 graduating students each year will earn the certificate." In addition, students have the opportunity to conduct research or intern at health clinics, community organizations, and civic institutions. The program exposes students to fields as diverse as medicine, social work, literature, and anthropology, aiming to cultivate in students "ethical sensitivity, self-reflection, and self-care, as well as historical perspectives, cultural awareness, and an engaged approach to health equity and health justice."

Through conversations with alums about the skills they had found to be in greatest demand in their fields, the College of Arts and Science at the **University of Missouri** developed a major in Digital Storytelling. Now situated in the School of Visual Studies, the program combines instruction in writing, critical theory, and aesthetics with training in video production, animation, and emerging media. It has been "very well received," said former Dean Pat Okker, resulting in a "dramatic increase in [the] number of majors." The major includes traditional courses in audio-visual skills, like "Introduction to 3D Modeling," with relevant

humanities courses such as "Writing and Theory for Digital Media." Students also take interdisciplinary courses that mix professional design with critical humanities methodologies. For example, in "Video Art I," students learn about the history, practice, and critical issues related to video art and new media, including installation art, interactive video art, projection mapping, and augmented reality. Katina Bitsicas, assistant professor and coordinator of the Digital Storytelling program, reported, "the Digital Storytelling program allows students the ability to infuse emerging artistic technology with a broad range of other humanities and arts-based coursework due to its liberal arts approach to curriculum design."

The **University of Rutgers-Camden** offers several interdisciplinary programs that provide an integrative educational experience. Health Science, now the campus's most popular major, requires students to take 60 credits in sociology, psychology, philosophy, and anthropology as well as STEM fields. Examples of specific courses include "Media and Health" and "Cultural and Global Competency in Healthcare." The Department of Childhood Studies, meanwhile offers a multidisciplinary curriculum rich in humanities and social sciences that examines children's lives and their cultural representations. These courses highlight a variety of professional applications, including education, public policy, social services, youth programming, and research.

#### PROBLEM-ORIENTED

#### A Liberal Arts Sustainability Major

#### San Diego State University

San Diego State University (SDSU) has created a highly popular B.A. in sustainability that serves as a liberal arts alternative to the university's BS in environmental sciences. Students in the program take courses in anthropology, biology, comparative literature, geography, history, philosophy, and political science that address climate change and other issues related to environmental sustainability. Launched in 2012, the program has over 200 majors and more than 50 minors.

#### **Program Design**

The program is based in the College of Arts and Letters, and is serviced by a network of affiliated faculty representing more than 20 different academic units. Together they have created a patchwork curriculum of cross-listed courses offered by their respective departments that deal with issues related to environmental sustainability. Examples include "Environmental Ethics" (philosophy), "Sustainability and Culture" (anthropology), "Conservation Science and Policy" (geography), "Politics of the Environment" (political science), and "Unnatural Disasters: History of Current Environmental Problems" (history). All students are required to take an introductory course in environmental science. Students are also required to do an internship in a sustainability-related field, either with community organizations, international organizations, government agencies, or businesses, and to participate in a course where they reflect on their internship experiences.

The program's promotional material makes a strong case for the pragmatic value of this liberal arts approach to environmental challenges: "The SDSU sustainability program is intended to meet these challenges by enabling students to explore the interacting cultural, sociopolitical, and biophysical aspects of complex environmental problems and devise practical solutions. To accomplish this, sustainability majors and minors are introduced to concepts and methodologies from the humanities, social sciences, and natural sciences and gain an interdisciplinary understanding of the many pressing environmental issues facing the nation and the world. There is little doubt that the next 50 years will see a dramatic growth in jobs related to environmental concerns."

"The growth of the program is not so much the result of active recruitment efforts as it is driven by student interest in the topic," said program director and professor of Geography Arielle Levine. "I am currently the only faculty member with an official appointment that includes a course release and our internship is the only permanent course offered that is specific to the program."

Crucially, many sustainability courses fulfill gen ed requirements, a primary way students discover the program. For example, a popular "Sustainable Places and Practices" course attracts a large number of business majors, many of whom have described it as an eye-opening experience.

#### Outcomes

In Fall of 2023, NHA partnered with SDSU faculty to survey 71 students in the interdisciplinary 100-level gen ed course that serves as an introductory survey and gateway to both the Sustainability and Environmental Sciences majors. While the course is pitched as an environmental sciences course, it integrates perspectives from the humanities and social sciences to frame the challenge of fostering sustainable interactions between humans and nature.

Survey responses illustrate how the course's integrative approach is one reason it's a popular choice among students to fulfill a natural science gen ed requirement. In responding to a question about the multidisciplinary nature of the course, several students said things like "it made science more understandable, allowing me to feel more connected with the material." Another student elaborated, "I think it is important to see [environmental challenges] from many perspectives. I didn't know much about social science before, but only environmental science cannot solve environmental concerns. Including many perspectives from social science is important." Yet another wrote that "It helps us see real-world application of science."

Students' responses illustrate how the course shifted their perceptions concerning the applicability of these fields and the value of a broad-based liberal arts curriculum. After completing the course, 97% of respondents agreed that the course helped them see how knowledge and skills gained through the humanities and social sciences can be applied outside the university and 87% agreed it helped them understand how knowledge and skills gained through liberal arts courses can help them in their careers. One student shared, "I want to major in construction management, so this course made me think about the sustainability side of construction."

A number of students shared how the course impacted them and their relationship to climate change. One undeclared student shared:

Prior to this class, I didn't think anyone could do anything about climate change and world hunger but now I know it just takes one person to start a ripple effect. The combination of humanities and social science made me feel more strongly and connected to the environment and motivated me more to do something to help environmental issues.

An undeclared student reflected, "I think the advantages of this [integrative] approach are to make the content seem more connected and personal to me and make solutions more realistic."

Students indicated they left the course eager for similar learning experiences. Eighty-eight percent indicated that it made them want to take a wider range of classes that explore a variety of subjects from different perspectives. One student elaborated, "I see advantages to incorporating these perspectives as it gives a humanistic perspective as to what is going on." And 83% percent said they were more likely to take a course that deals with social, political, or economic inequality as a result of the course. "I think that learning about other countries on how they [are] affected in many ways including climate and comparing to the U.S. it helped me understand impacts around the world," elaborated one student. Another student wrote that "understanding the different situations in different countries makes us better global citizens."

These survey responses and the overall success of SDSU's sustainability program illustrate how it appeals to students' personal and professional aspirations. "Sustainability" is perfectly legible to students as a concept

that connects with both personal values and enticing jobs. By framing a liberal arts alternative to traditional environmental science programs in this way, SDSU faculty demonstrate how a robust blend of natural sciences, social sciences, and humanities can prepare students to do good for the world while doing well. The program's popularity has provided an enrollment boost to 20 participating departments and a prime opportunity to introduce students to their disciplines.

#### Encouraging Students to Grapple With Ethical Challenges Surrounding Technology

#### University of California, Santa Cruz

With an NEH grant, the Humanities Division at the University of California, Santa Cruz (UCSC) created the Humanizing Technology initiative, which is centered around a set of six gen ed courses that examine the goals and impacts of various technologies. Students who complete three of these courses earn a Humanizing Technology certificate. The courses are open to all undergraduates but were designed to appeal to the large number of engineering students at UCSC. As is the case at many institutions, engineering students at UCSC have very limited capacity to take courses outside their major due to the large number of courses required by accrediting bodies. In this context, students frequently do not see the gen ed curriculum as a unique opportunity to acquire additional skills so much as a hurdle to clear that is disconnected from their primary course of study. By offering a coherent set of gen ed courses that demonstrates how engineering students can leverage the humanities to navigate sociocultural and ethical challenges related to technological production, the Humanizing Technology certificate program is helping engineering majors better appreciate the pragmatic value of a liberal arts education.

#### **Origins**

UCSC Dean of Humanities Jasmine Alinder began working with faculty to identify curricular development opportunities immediately after she arrived in Fall 2020. They built off a previous proposal for a humanities certificate for engineers from Jody Greene, a professor of literature who was then director of the Teaching and Learning Center and now serves as associate campus provost for academic success. Greene wrote in UCSC Magazine:

We want students to have opportunities to grapple with ethical, cultural and social questions that do not have clear "right" answers, particularly so that our students who wish to work in the area of technology have an opportunity to think beyond optimization, the race for innovation, and corporate bottom lines.

Alinder and her colleagues formalized this vision and obtained funding through the NEH's Initiatives for Hispanic-Serving Institutions grant line in 2021 to develop the Humanizing Technology certificate.

From application to implementation, the Humanities Division forefronted broader institutional priorities in the three primary goals laid out for the initiative: (1) ensure that UCSC engineering students understand the social, cultural, and historical ramifications of new technologies; (2) make gen ed requirements that students often

complete haphazardly more purposeful; and (3) smooth pathways for students to switch majors without prolonging their time to degree in light of retention challenges within the Baskin School of Engineering and at UCSC more broadly. By addressing needs related to retention, student success, local workforce demands, and urgent social challenges, the integrative curricula developed through the grant demonstrates how the liberal arts contribute to UCSC's broader mission and goals. Greene reflected, "In our technologically-saturated present and future, who better than humanists to help us think through the implications of artificial intelligence, information literacy, and the increasingly porous boundaries of the human."

To develop this vision, Alinder and her colleagues held stakeholder meetings with colleagues in engineering while they prepared the grant proposal. Through an iterative process, they worked together to outline a gen ed curriculum that advances both units' educational goals. They discussed gaps they had observed in engineering majors' overall education and how the humanities faculty could leverage their expertise to address those gaps more directly and effectively. Through this collaborative effort, they designed the program to equip students with the critical and reflective capacities they need to ensure that their technological contributions are ethical and support human flourishing.

In Summer 2022, faculty teams worked together to design Humanizing Technology courses that can be taught by faculty across the Humanities Division. Through a series of summer workshops, these teams developed course materials and incorporated inclusive pedagogical practices into the courses. They also created both in-person and online modalities for each course so they are ready to be taught in either format. Finally, faculty worked collaboratively with staff to get the new courses, gen ed requirements, and certificate approved in time to launch the first courses in Winter 2023. By Fall 2023, the Humanities Division had created a robust set of six new gen ed courses that explore social and ethical issues raised by various technologies through the liberal arts.

# **Program Design**

To complete the certificate, students select three courses from the following options: "Ethics and Technology," "Humans and Machines," "Language Technology," "Race and Technology," "Technologies of Representation," and "Artificial Intelligence and Human Imagination." Collectively, these courses fulfill five different categories of UCSC gen ed requirements: textual analysis, cross-cultural analysis, ethnicity and race, perspectives on technology, and interpreting arts and media. There are no prerequisites for any of the courses, which students can take in any order they choose.

The Humanities Division constructed the program so that it belongs to the humanities faculty as a whole rather than particular disciplines or faculty members. Courses are listed with a new humanities designation rather than disciplinary designations and are currently taught by faculty from seven different departments: history, history of consciousness, literature, linguistics, philosophy, art history, and critical race and ethnic studies. This broad-based approach encourages faculty across the humanities to take ownership of the program and mitigates the risk of the program being compromised by departmental capacity issues or the departure of specific faculty members.

All of the courses approach technology as a way into fundamental questions concerning meaning, values, experience, and identity—all subjects that are at the heart of the humanities. They explore how humans and technology have shaped one another over time and the differential impacts of specific technologies on different communities, inviting students to reflect critically on the role of technology in their own lives from a broadened perspective.

Students gain exposure to a variety of liberal arts disciplines not only across the curriculum as a whole, but within individual courses. For example, "Humans and Machines" was co-designed by specialists from history, literature, art history, and philosophy and incorporates materials from these disciplines as well as theater, film studies, and social theory. Through this integrative approach, students experience for themselves how applying a range of disciplinary perspectives provides a more expansive view of and deeper insights into a given problem. And the focus on complex questions related to technological production and meaning demonstrates both the pragmatic and existential value of a liberal education in the 21st century.

#### Outreach

As they built the curriculum, the UCSC Humanities Division developed branding, materials, and strategies to promote it to students, particularly those studying engineering. The program website forefronts a direct pitch to such students: "As an engineer, you will be faced with ethical choices about the technologies you create. Are you ready to expand your education with gen ed humanities courses exploring the complexity and nuance of technology?" Division staff created and distributed a promotional flyer for students headlined with the hook, "Interested in the social impacts of technology?" They also created a one-page fact sheet for advisors to help them articulate the benefits of the certificate program and guide students regarding how to incorporate it into their degree plan.

In addition to these more traditional outreach mechanisms, division staff created two sets of brief, engaging promotional videos for each of the six courses—one aimed at engineering students specifically and the other pitched more broadly. In the latter set of videos, humanities graduate students preview the fundamental questions at the heart of each course. In the former set, Jim Whitehead, Baskin School of Engineering professor of computational media and associate dean of undergraduate affairs, articulates the value proposition of each course for prospective engineers. Through these videos, students are presented with compelling, accessible pitches for the existential and pragmatic value of each course from both sides. This two-pronged messaging strategy aggregates the distinct credibility of these constituencies to attract students with different interests and motivations to the liberal arts.

## **Outcomes**

In the 18 months since the launch of the program, Humanizing Technology has succeeded in providing a richer, more purposeful gen ed experience for engineering students at UCSC. Moreover, this curriculum is helping these students better understand the sociocultural implications of the technologies they will use and create in their careers. Already, 559 students have taken a Humanizing Technology course, 46% of whom are engineering students. And 38 students have already completed the certificate. One computer engineering student reflected, "it was great considering diverse perspectives when evaluating a technology, prompting me to think beyond the code and algorithms." Clearly, the focus on ethics aligns with many students' concerns and aspirations for their work. As one student noted, "I want to be part of creating technology that adds to people's lives and helps them, not taking away and profiting from them." Another student stated, "I want to complete the Certificate to help me think more ethically when I work in the tech industry."

There is also evidence that the integrative curriculum is shifting students' perceptions of the humanities/liberal arts and leaving them hungry for more such experiences. One student described their experience as "amazing," saying that they would miss it and wished it had been longer. Another said that their Humanizing Technology course was "easily one of [their] favorite non-major classes."

While it is too early to say how the initiative will impact majors and enrollments in the Humanities Division more broadly, the courses' success in engaging engineering students in the humanities suggest it is a promising approach to attract a broader range of UCSC students to the humanities.

From an advocacy perspective, the program's success is strengthening the Humanities Division's position within the university and providing a visible center of gravity in technology outside of STEM departments. As a result, Humanizing Technology faculty have been approached by faculty in the sciences and engineering to consider cultivating similar kinds of inquiry models for other students, at both the undergraduate and graduate level. And the faculty themselves have formed a cohort of cross-departmental colleagues, initiating research projects and grants together.

# Building Sustainable Community Food Systems University of Hawai'i - West Oahu

Since 2016, the University of Hawai'i - West Oahu (UHWO) has offered a bachelor of science in Sustainable Community Food Systems (SCFS) that integrates biophysical sciences, social sciences, and humanities to prepare students to reform unsustainable food systems in Hawai'i and beyond. UHWO has an undergraduate population of less than 3,000, the vast majority of whom are drawn from the local area. Nearly 90% are students of color, including significant populations of Native Hawaiian (28%) and Filipino (23%) students. The SCFS program appeals to this highly diverse population of students by demonstrating how the liberal arts illuminate problems in their communities and point to solutions. As a result, it has consistently attracted 30–45 majors since its founding. SCFS majors learn to leverage a variety of disciplines to positively impact human health, preserve the environment, effect policy change, and advance social justice goals through sustainable food practices.

# **Origins**

UHWO's Sustainable Community Food Systems program is led by founding director Albie Miles. Miles earned his doctorate in environmental science, policy, and management at the University of California, Berkeley, where he examined social and structural obstacles to sustainable food practices through the liberal arts alongside his training in the applied science of agroecology. UHWO hired him to leverage this interdisciplinary training to help students address longstanding problems in the local community that disproportionately impact Indigenous community members. At UHWO, he built a curriculum that includes biophysical science-focused ecology courses and topical/theoretical courses that draw heavily on the humanities and social sciences, such as "Agriculture, Food, and Human Values." Moreover, both types of courses frequently invite students to integrate scientific approaches and historical, cultural, and social perspectives.

The Sustainable Community Food Systems program aligns with the university's commitment to "offer a distinct and accessible student-centered education that focuses on the 21st-century learner [and] embraces Native Hawaiian culture and traditions." Since 2017, Chancellor Maenette Benham, a Native Hawaiian scholar of education, has championed interdisciplinary education and efforts to center Indigenous knowledge in the curriculum. UHWO recently hired an expert in traditional ecological knowledge to expand the Indigenous knowledge component of the SCFS curriculum.

Meanwhile, UHWO has built a Hawaiian and Indigenous Health and Healing (HIHH) program that takes a similarly integrative approach to health care in the community. HIHH majors study Western and Indigenous medicine, public health, natural sciences, social sciences, Hawaiian language and culture, and the history of the Pacific region. There is a mutually supportive connection between HIHH and SCFS faculty and some overlap between their respective curricula; for example, HIHH students can take SFCS courses to fulfill their health and food requirements. Through these connections, UHWO faculty and administrators are working together to integrate applied science and study in the liberal arts to address community problems in ways that honor Indigenous knowledge.

# **Program Design**

SCFS majors must complete five core courses: "Survey of Sustainable Community Food Systems of Hawai'i," "Introduction to Agroecology," "Theory and Practice of Sustainable Agriculture," "The Politics of Food," and "Agriculture, Food, and Human Values." Through this core curriculum, students are encouraged to integrate knowledge and skills from biology, ecology, horticulture, Indigenous studies, political science, philosophical ethics, history, literature, anthropology, sociology, and public health to promote sustainable agricultural practices at the local and global levels.

SCFS majors also must take two additional upper-division electives on Native Hawaiian history, culture, and agricultural practices. Offerings include "Ahupua'a: Hawaiian Natural Resource Management from Mountain to Sea," "Loko i'a and Near Shore Fisheries Management of Hawai'i," and "Indigenous and Western Environmental Worldviews."

Finally, students must complete a senior practicum, applying the interdisciplinary knowledge and skills acquired through the program to food system transformation projects in professional settings. They are placed within a state agency or non-profit organization that promotes sustainable agriculture through handson projects, education, and/or advocacy. Students complete at least 120 hours of supervised work for their chosen organization. Through this experience, students learn about career pathways and employment opportunities where their unique interdisciplinary skill set is valued and leveraged to promote human and environmental health in Hawai'i and beyond.

## Outcomes

In the Fall 2023 semester, NHA partnered with UHWO to survey students taking two gen ed liberal arts courses offered through the SCFS program: "Survey of Sustainable Community Food Systems of Hawai'i" and "Agriculture, Food, and Human Values." We received eight responses, through which we learned how the integrative approach taken in these courses helped students appreciate how studying the liberal arts can help them succeed in their careers and positively impact their communities and the natural environment.

First, students noted with appreciation the different learning opportunities afforded through the courses' liberal arts approach to these topics in the context of science-heavy curricula. We asked students if and how the course seemed different from others they had taken. A first-generation Native Hawaiian student enrolled in the survey course described how the discussion-based approach reinforced their educational and professional trajectory:

Whatever the topic may be for the week, this course takes a deeper look at what relates to the particular topic and provides a larger definition. In other words, we become interactive with the readings ... Going deeper into the food and agriculture system, I would like to share everything I learn with my community ... This is just the start of a new beginning.

This kind of passion for the topic and intrinsic motivation to apply what is learned struck another first-generation student—who works as a safety inspector—as a distinctive hallmark of the ethics course in contrast to more instrumental approaches to education. He shared how it helped reignite his passion for science:

Learning science used to be a means to an end in a sense. This course makes me want to dive deeper and learn more about sustainability and what it means to everyone. The growth was through opening my narrow mind. When it comes to inspections, there are normally yes or no answers. This course helped me to think about the why.

Another student described how the philosophical tools presented in the course helped them articulate the values that motivate their pursuit of the SCFS major in a more holistic way:

I never took a philosophy/ethics course before, so centering around that while talking about other subjects made me be more interested in those subjects. Through philosophy and determining the moral value of animals and the environment as a whole, this class has allowed me to be justified in my core belief [in] restoring our food systems. I now have my own manifesto, which could change from time to time. However, having that as a living document and connecting all of the things that I am a part of will fuel my reason to fight for change.

Students indicated these kinds of reflective educational experiences left them hungry for more; 86% agreed that their course made them want to take a wider range of classes that explore a variety of subjects from different perspectives.

Students also agreed that their course helped them see how knowledge and skills gained through the liberal arts can help them in their career (86%) and how those same skills can be applied outside the university (86%). Indeed, the courses' focus on the local community and integration of Native Hawaiian perspectives with scientific ones helped students articulate specific ways they can apply what they learned to improve their communities. A first-generation Native Hawaiian student wrote:

This course made me question life. From a scientific and humanities perspective, I learned how political these types of things can be. Ethics gets to the core of your being and really digs into the truth of your worldview. ... This has prepared me to enter the future making better and more ethical decisions ... understanding that, as Native Hawaiians, we need to do better in the things that we eat not only for our individual physical health but for the thriving lahui.

Collectively, these responses show how incorporating content from across the liberal arts in SCFS courses helps students connect their learning to their personal development, professional goals, and aspirations for bettering their communities. Students testified to the synergistic effect of connecting scientific knowledge and tools for addressing environmental challenges with critical reflection on ethical values, Indigenous perspectives, and the social, economic, and historical factors that have shaped our food system. As a result, students emerge from the program understanding sustainability challenges in their full complexity, equipped

with a wide range of technical and sociocultural strategies for addressing these problems, and able to articulate the values that guide their work. In this way, SCFS' integrative approach provides students with a powerful combination of knowledge and skills that empower them to help reform community food systems toward greater sustainability through a variety of means.

More broadly, SCFS offers a promising model for others to consider: building an integrative, interdisciplinary program around a pressing local problem that demands technical expertise, a firm understanding of the sociocultural context, and ethical leadership.

### **Profiles**

**Merrimack College**'s philosophy department offers a bioethics minor, which equips students "with the tools to draw connections between the health sciences and other areas of study, including human development, philosophy, theology, communications, sociology and religious studies." Students develop a "strong grounding in ethical theory and will be able to apply this knowledge to current moral controversies arising in medicine and health care." The minor consists of 18 credits, including one core science course (biology, chemistry, nutritional science, etc.) as well as two core ethics courses. Electives for the remaining credits include a broad range of humanities and social science courses, such as "Global Empire, Race, and Nature, 1750–1945," "Food Justice," "Gender and Global Health," and "Philosophy of Science."

At the **University of Massachusetts, Boston**, faculty leveraged funding from an NEH Connections grant to create "Living With the Urban Ocean," an interdisciplinary cluster of four courses that leverage a variety of liberal arts disciplines to examine Boston Harbor's history, ecology, and significance to the city. An introductory course called "The Urban Ocean" combines Indigenous studies, marine science, history, narrative writing, and politics and law to study the local environment with an emphasis on stewardship. In a capstone course co-taught by faculty in English and climate adaptation, students consider how history and culture are integral to engineering and science-based solutions to climate and environmental challenges. Students engage with the National Park Service and local Indigenous communities as they leave the classroom to explore the environment they are studying and reflect on their own relationships with water and their surroundings.

The Program on the Environment (PoE) at the **University of Washington** is an interdisciplinary program housed within the College of the Environment. The PoE offers a B.A. and a minor in Environmental Studies, where students explore complex problems through the "perspectives, methods, and contributions of the natural sciences, social sciences, and humanities." In the major, students take electives across a wide range of disciplines, including biological systems, environmental justice, sustainability, economics/business, policy/governance, and values and cultures. In a three-quarter capstone course series, students undertake an internship with a community partner and gain hands-on experience, exploring career possibilities and building professional communication skills. Through its interdisciplinary approach to the environment, PoE prepares students to "imagine, analyze, and invent innovative solutions to help bring about a more equitably sustainable world."

In the Sustainable Communities program at **Eastern Oregon University** (EOU), students complete an interdisciplinary set of courses that integrate environmental science, history, economics, political science, and

environmental science. Integrated electives include "Environmental Public Policy" and "Environmental Economics." Students learn how to identify and address place-based needs by developing partnerships with community leaders and organizations to instill sustainable practices in communities around EOU. The project-based learning model leverages EOU's rural location to help students "build distinct skill sets to address environmental remediation or restoration, public policy, rural economic development, and other community-building projects."

Loras College's minor in sustainability encourages students to understand the "physical, social, and ethical dimensions of environmental sustainability from the local level to the global." Students are required to take a "Sustainability Ethics" course that features community-based learning, and they select additional courses from an interdisciplinary curriculum that pulls from the sciences, social sciences, and humanities. Students mix classes like "Mississippi River: Lore & Legacy" with "Chemistry of Environmental Sustainability," and the minor also offers interdisciplinary study abroad classes, which incorporate field work. In "Sustainable India—The Interface of Nature-Economy-Society," students travel to India to see first hand environmental issues like loss of biodiversity and climate change, learning from Indian resource managers, policymakers, and scientists. The minor emphasizes students' growth as active learners and reflective thinkers, focusing both on deepening their scientific literacy and developing an awareness of ethical and political challenges relating to sustainability policies and initiatives.

# Integrative Infrastructure

The initiatives featured in this section involve cross-campus efforts to build a culture of integrative learning to help students appreciate the value of a broad-based curriculum. Integrative infrastructure varies from brick-and-mortar centers to departments to initiatives that span departments and centers. Such infrastructure nurture connections among faculty from disparate fields around common topics, provide resources to encourage the implementation of integrative pedagogies, and serve as incubators for new integrative curricular initiatives. This infrastructure sometimes bridges two specific fields while at other times it serves as a kind of neutral ground that supports a wide variety of integrative curricular collaborations. Whether it has a large budget or no budget, this infrastructure advances the liberal arts by facilitating the creation of integrative courses and programs.

The infrastructure highlighted in this section is helpful precisely because the interdisciplinary collaboration and administrative innovation that facilitates integrative educational experiences can be so challenging. These initiatives help to shift faculty and administrators out of a zero-sum mindset to discover how working to bridge disparate fields and units on campus can be of great benefit to all, particularly students. Integrative infrastructure creates time and space for this difficult work and provides resources to incentivize it. This support fosters expertise in designing integrative experiences for students and surmounting institutional barriers to integration, which integrative infrastructure then distributes throughout the university. In these ways, the initiatives featured below serve as engines of curricular innovation that generate integrative learning opportunities to advance the liberal arts on campus.

# Establishing a Center to Connect the Liberal Arts and Professions

# Creighton University

Creighton University established the Kingfisher Institute for the Liberal Arts and Professions in 2018 to explore curricular and programmatic integration of the liberal arts—especially the humanities—and professional education. As a Jesuit institution, the liberal arts have been central to Creighton's mission since its founding. In addition, consistently more than 50% of incoming undergraduates enter on a pre-professional track, usually looking toward careers in the health sciences. Meanwhile, the university's professional programs in medicine, nursing, and other health professions have expanded with the opening of a Health Sciences Campus in Phoenix, Arizona in 2021. The Kingfisher Institute has secured and distributed funding to liberal arts faculty to create courses and programs that combine the core principles and practices of the liberal arts with content that focuses on health and illness. Through an intentional process of integration, the Kingfisher Institute has accelerated the revitalization of Creighton's liberal arts curriculum.

# **Origins**

The Kingfisher Institute for the Liberal Arts emerged from previous efforts to revitalize the general education curriculum that resulted in the establishment of the Magis Core Curriculum in 2010. Tracy Leavelle, professor of history and medical humanities and founding director of the Kingfisher Institute, recalls how Creighton faculty in the liberal arts began to embrace applied approaches. "At the time, we had a very large and very traditional core curriculum dominated by survey courses," said Leavelle. Like many Catholic (and particularly Jesuit) institutions, Creighton had retained substantial requirements in theology, philosophy, history, literature, and languages. While many of these requirements have remained in place, faculty voted to reduce the overall credit load for such requirements to create more space for innovative interdisciplinary and applied courses. They also helped secure buy-in from professional schools on campus that saw more value for their students in the new core. "Both the College of Nursing and the Heider College of Business adopted the new curriculum," Leavelle explained. "They were much more amenable to it than the old one; the reduced load helped alleviate the competition for courses." Now, all undergraduate students at Creighton engage with this core curriculum.

Leavelle described how the Magis Core Curriculum resulted in more rewarding educational experiences for faculty and students alike. For example, Leavelle designed a first-year seminar called "Critical Issues in Human Inquiry" that enabled faculty to teach problem-based approaches to issues of interest to students, such as "Unnatural Disasters," taught by an environmental and spatial historian. Leavelle and his colleagues also introduced capstone "Intersections" seminars grounded in the liberal arts and framed around ultimate questions (e.g., "What Really Matters: Discernment, Conscience, Compassion") and complex topics (e.g., "Sciences, Ethics, and Society"). These courses facilitate reflection on students' undergraduate experience and their vocational goals while emphasizing the integration of different types of learning they've encountered. The Creighton University Catalog states:

As students approach the completion of their undergraduate education, they need to begin to integrate what they have learned about themselves and their world ... Students and instructors will work at the intersection of intellectual inquiry and personal experience as they seek together to understand intersections in the world at large ... [through] research and writing as well as reflection, collaboration, and debate.

Meanwhile, additional core reforms created space for innovations within liberal arts departments that helped to demonstrate the pragmatic value of their disciplines to a broader range of students. For example, in history, a Western/non-Western requirement that had primarily been serviced through traditional geographic and period-based survey courses was replaced by a "global perspectives in history" requirement that created more space for transnational offerings that highlight pressing problems and potential solutions, such as "Modern Democracy and Its Challenges."

Through these efforts, faculty and administrators in the pre-professional schools came to see how their colleagues in the College of Arts and Sciences (CAS) could enhance the training they offered students. And CAS faculty found opportunities to expand upon these popular new offerings with new courses and programs, such as an interdisciplinary Science and Medicine in Society minor established based in the history department. "Given the high level of interest in health professions in our student population, we hired faculty to begin [the] minor," Leavelle said. "It has been relatively popular. The individual courses fill quickly. As a result, more students [are] exposed to the liberal arts beyond the requirements of the core curriculum."

In 2016, when Leavelle was Associate Dean for Humanities and Fine Arts in CAS, he and Dean Bridget Keegan began to explore the idea of a center that would expand these efforts. Leavelle initiated a series of conversations with department chairs and other leaders in the humanities to consider the role of the humanities in contemporary higher education. Over the next two years, they developed their vision and cultivated buy-in from key stakeholders by aligning the plan for the Kingfisher Institute with a campus-wide strategic planning effort. In a moment of inspiration, they decided to take the center's name from a poem, "As Kingfishers Catch Fire," a favorite of Creighton President the Rev. Daniel Hendrickson. The poem was the centerpiece of Hendrickson's inaugural address. Authored by the Victorian Jesuit Gerard Manley Hopkins, the work reflects on themes of vocation and justice, immanence and transcendence:

Each mortal thing does one thing and the same: Deals out that being indoors each one dwells ... Crying what I do is me: for what I came. I say more: the just man justices.

It is the active sense of justice in these last words that guide much of the activity of the institute. The name of the Kingfisher Institute, then, points to the ways that the university prepares each student for both a particular vocation and a larger purpose. The concept also gained the support of President Hendrickson as an institutional embodiment of his ideas about the ultimate aims of a Jesuit education. With this support secured, the Institute was approved in 2018 and opened in January 2019. Its offices are located in the new School of Dentistry building as a symbol of the integration of the liberal arts and the professions.

## **Programs**

Over the past five years, the Kingfisher Institute has distributed 30 small grants to faculty to support their efforts to strengthen connections between the liberal arts and professions in their courses. These grants are organized around three broad initiatives that have proven to be fertile ground for forging such connections: antiracism, humane health, and sustainability. Faculty from any school or program in the university are eligible for the awards as long they align with the initiatives and encourage integration of the liberal arts and professions. Awardees often serve as consultants in subsequent years, offering up models and content to inspire and guide other faculty and programs.

Meanwhile, the Kingfisher Institute has identified additional opportunities to integrate professional and humanistic instruction, such as through non-credit-bearing courses or activities that fulfill Interprofessional Education (IPE) requirements for students in all of Creighton's healthcare professions programs. The goal of IPE is to prepare healthcare practitioners to work in collaborative teams that address the complex challenges of care. Each IPE activity enrolls a diverse group of trainees, from aspiring nurses and doctors to future therapists and dentists. "There are all kinds of ways for liberal arts faculty to participate in IPE, but I don't think they currently are to the extent that they could," says Leavelle. The institute created a special faculty stipend to incentivize participation, helping to build a critical mass of clinical and liberal arts faculty ready to facilitate these activities. For example, an English professor and palliative care physician lead one of several sessions in "Creative Expressions in Healthcare," a course in which future practitioners experiment with poetry, memoir, writing for advocacy, and the visual arts. Such creative pairings have led to additional collaborations, such as graduate-level courses in medical humanities and ethics.

Through its grants to faculty and involvement in IPE and other aspects of healthcare education, the Kingfisher Institute has built a community of practice around connecting the liberal arts and professions, one capable of creating increasingly robust pathways for students. Last year, the Kingfisher Institute received an NEH Initiatives Grant in partnership with Arizona State University (ASU) to develop a four-year humanities and health justice pathway for first-generation college students interested in health careers.

The pathway begins with a weeklong summer bridge program, which was held at ASU in Summer 2023, and continued with a new one-credit seminar for first- and second-year students in Spring 2024. The seminar, called "Reimagining Care," incorporates contributions from faculty in history, English, studio art, and medicine, each receiving a stipend from the grant. The course is built around the book *The People's Hospital: Hope and Peril in American Medicine* by Ricardo Nuila, which examines the safety net function of a large public hospital in Houston. "We want them to do real humanities work and struggle with this text while being guided through an exploration of health justice in America," says Leavelle. Leavelle works with Elisa New, Director of the Center for Public Humanities at ASU and host of the PBS series *Poetry in America*, to enrich the course with multimedia material from the *Poetry in America* content library.

## **Outcomes and Future Directions**

Collectively, these efforts to integrate the liberal arts and professions, particularly those in healthcare, have helped to bridge Creighton's historic Jesuit liberal arts-based mission and its identity as an innovator in Catholic healthcare education. By supporting accessible, relevant liberal arts instruction for students enrolled in health-related degree programs, the Kingfisher Institute is helping to meet a large and growing portion of the student population where they are. "We recognize who we are and who our students are," says Leavelle. "Rather than complain that 'the students only care about getting into medical school,' we're taking it upon ourselves to show them why they should care about what we have to offer." At the same time, the Kingfisher Institute is supporting the integration of the liberal arts into medical education itself. "With the establishment of our new medical campus in Phoenix, Creighton will be the largest Catholic educator of healthcare professionals in the country within a year or two," says Leavelle, who himself teaches medical humanities to aspiring doctors. "We're making the case that the liberal arts and ethics have to be incorporated into these programs, or it's not truly a Jesuit education."

# Supporting Team-Taught Integrative Courses

# Norwich University

Since 2019, the Norwich Humanities Initiative (NHI) has supported the development of team-taught general education courses at Norwich University, a private military college. These courses integrate humanities with natural sciences, social sciences, and professional training. Students learn to apply distinct disciplinary approaches to gain deeper insight into engaging topics, local issues, and complex problems. The initiative, supported by the Davis Educational Foundation (DEF) and the NEH, has enriched the general education curriculum and helped demonstrate the value of the liberal arts to a population of students who overwhelmingly pursue pre-professional majors and/or careers in the military.

# **Origins and Structure**

The Norwich Humanities Initiative was launched with support from the NEH's Connections grant program, which seeks to expand the role of humanities undergraduate education by fostering collaborations with other fields of study. A planning grant enabled the formation of a collaborative team of faculty drawn from the sciences and humanities to develop a set of four interdisciplinary courses: "Narrative Medicine" (English and nursing), "Geoarchaeology of Lost Cities" (history and geology), "Game Theory" (philosophy and economics) and "True Crime" (English and criminal justice). The faculty team participated in workshops facilitated by team-teaching experts to help them develop their courses. A subsequent NEH implementation grant supported course releases to facilitate team teaching and programming to promote the initiative to students.

The project was spearheaded by Amy Woodbury Tease, an English professor who has chaired the Department of Global Humanities since 2022, and co-directed by Tara Kulkarni, a professor of engineering who serves as Norwich's chief research officer. Woodbury Tease reflected on the rationale for the initiative:

Less than 3% of Norwich students were pursuing majors in the humanities. If we're suffering for majors because of who we are and where we are, let's focus on how humanities pair with other disciplines. So we started having conversations with other departments about how we can better support what we both do.

NHI hosted roundtables and conversations for other faculty on campus to facilitate these conversations. Woodbury Tease emphasizes how focusing on the gen ed curriculum made it easier to get buy-in from both faculty partners and students: "It was really key that these courses fulfill gen ed requirements towards a degree. Once other departments were able to see how it benefits their students, they were willing to embrace the team-taught course."

Once Woodbury Tease and her colleagues successfully implemented the initial set of courses with NEH support, they secured a larger DEF grant to expand upon this model. To date, NHI has supported the creation of 11 team-taught integrative general education courses. More recently developed courses include "Race, Gender, and Sport in 20th Century America," (history and exercise science) "Rocks and Writing," (creative writing and geology) and "Making Peace" (English and architecture). A twelfth course, "Representations of Muslims in the Media," will be offered for the first time in 2024–2025. An increasing number of faculty and departments have entered the NHI orbit through this steady addition of courses. To date, more than 20 faculty representing 10 departments have participated in team-taught NHI courses.

#### Outreach

Grant funding supported the extensive outreach work necessary to firmly establish NHI within the Norwich curriculum. "We generated momentum through persistence," Woodbury Tease said. "We built relationships with upper administrators, presented to the Board of Trustees and Board of Fellows, and communicated consistently with faculty, students, and stakeholders. We reached out to our offices of admissions and communications and various centers on campus."

NHI faculty also conducted outreach to community partners. Partners hosted class field trips, visited NHI classrooms to present their work, and facilitated embedded research opportunities for students. These partnerships helped students see how they can apply the knowledge and skills gained through these integrative liberal arts courses outside the classroom.

DEF funds supported student fellowships and an expansion of NHI programming that has proved crucial to raising awareness about the initiative. Each year, two to three NHI Fellows receive funding to support their work as ambassadors for the initiative. They give promotional talks to fellow students in classrooms, orientation programs, student group events, and other campus gatherings to raise awareness about NHI. Such student ambassadors generally bring a unique credibility that faculty members cannot. In the context of a student body like Norwich's, where most students pursue STEM/professional degrees and/or careers in the military, it is especially powerful to hear fellow students testify to the value they have gained from the integrative liberal arts courses offered through NHI.

NHI leadership has worked closely with these fellows, meeting regularly to strategize how to advance the initiative. Fellows have identified creative ways to connect with their peers and raise awareness about the initiative. For example, they proposed the creation of a humanities pin, equivalent to those offered by other programs, that students now wear on their uniforms at graduation and other formal occasions. Fellows also supported media-based outreach, including podcasts and blogs.

### **Outcomes**

NHA worked with NHI project directors to survey students to learn how NHI courses influenced their perceptions of the humanities. From 2020 to 2023, we surveyed 76 students enrolled in NHI courses. Across the board, survey data illustrate how the initiative achieved its stated mission to help Norwich students appreciate how the liberal arts prepare them to be better "Citizen (Soldier) Scholars." Eighty-six percent of respondents agreed that their NHI course helped them see how knowledge and skills gained through humanities courses help them better contribute to/serve their community.

Quantitative and qualitative data demonstrate how integrating the humanities with other disciplines helped Norwich students pursuing majors outside the humanities better appreciate the pragmatic value of humanities education. Eighty-three percent of non-humanities majors agreed that their NHI course helped them understand how humanities knowledge and skills can be applied outside the university; 78% agreed their NHI course helped them understand how the humanities can help them in their careers. Students elaborated in their responses to open-ended questions. An undeclared major enrolled in "Narrative Medicine" wrote: "Knowing that the science/clinical-minded professor endorsed and valued the methods being taught made a significant difference. Knowing that a clinical professional felt that the extra time it took [to record a patient's narrative] was worth it gave it much more credibility." Another student noted with appreciation how

"talking about problems in a multidisciplinary context can allow for potential solutions to entrenched problems to be explored." More than half (55%) of non-humanities majors who responded to the survey agreed that their NHI course made them want to take more classes in the humanities.

Similarly, faculty survey data illustrate how participation in NHI courses shifted both humanities and non-humanities faculty's perceptions regarding the value of cross-disciplinary collaboration. One hundred percent of all faculty surveyed strongly agreed that participating in NHI made them more likely to seek out additional opportunities to collaborate. One hundred percent of non-humanities faculty agreed that participating in NHI made them more likely to incorporate humanities content and activities into their non-NHI courses. A non-humanities faculty respondent elaborated:

Now, I have a much more detailed understanding of the societal events and policies of the past. I also have a much better understanding of historical research methods and would feel a lot more comfortable assigning projects in my traditional courses that have a historical research component to them—thanks to [collaborating professor]!

For their part, 100% of humanities faculty strongly agreed that participating in NHI made them more likely to connect subject matter in their non-NHI courses to other fields of study/professions. Finally, 100% of faculty respondents agreed that participating in NHI enhanced their ability to communicate the value of the humanities to students. Faculty survey responses illustrate how the investments in collaboration made through NHI have paid dividends beyond individual NHI courses.

These data show how courses that integrate the humanities with the natural sciences, social sciences, and professional training have shifted students' and faculty members' perceptions of the liberal arts and humanities. They have helped pre-professional and military students better appreciate the value of the liberal arts for their lives and careers and encouraged them to take more liberal arts courses. And they have motivated faculty to draw more connections between disparate disciplines and fields of study in their courses and seek opportunities to collaborate. In these ways, NHI has fostered a more robust liberal arts culture at this private military university.

## **Future Directions**

As the DEF grant comes to a close, it is clear that Woodbury Tease and her colleagues have secured the institutional support needed to sustain the initiative. In recognition of the NHI's success, Norwich created a new role for Woodbury Tease to recognize her ongoing leadership: associate dean of interdisciplinary curriculum. She and her colleagues have worked with administrators to find ways to sustain NHI that don't require course releases. One strategy has been to cross-list NHI courses as special topics courses in teaching faculty's respective departments. This way, faculty can count their NHI course towards their regular teaching load as an elective. Moreover, Norwich's new provost has committed funding to pay adjunct faculty to cover any gaps in departmental curricula resulting from faculty participation in NHI courses.

As Norwich enters the preliminary stages of a general education curriculum overhaul, NHI is well-positioned to become further institutionalized. The faculty member tasked with researching potential gen ed models participated in NHI and has been looking into topics-based models that align with NHI courses. "You need to build these things so that you're essential to the new general education curriculum," Woodbury Tease emphasizes. This is particularly key at an institution like Norwich, where the humanities have a small footprint and few majors.

At the same time, NHI has helped lay the foundation for new interdisciplinary degree programs and ensured a robust place for the humanities within the programs. For example, students enrolled in a popular new information warfare minor offered by the School of Cybersecurity and Advanced Computing must fulfill a cultural and historical context requirement. To do so, students select two courses among offerings in history, cultural anthropology, communications, languages, and psychology. Norwich faculty are now working to build out the program as a major. Meanwhile, the new provost is working to expand an existing bachelor's of interdisciplinary studies program, currently housed in the College of Graduate and Continuing Education, to be offered to traditional students on the residential campus as well. The plan is to develop topical tracked paths within the program, such as medical humanities, to attract more students. Woodbury Tease and her colleagues hope to position NHI courses as gateways into these proposed tracks and create a triple-taught interdisciplinary seminar to introduce all the different tracks to be offered. Through all of these efforts, Norwich faculty aim to build on the success of NHI to give the students who experience the value of the integrative liberal learning offered through NHI courses opportunities to go further.

# Fostering Programs That Integrate the Humanities and Training for a Wide Variety of Careers

# University of Arizona

The Department of Public and Applied Humanities (PAH) was created in 2017 by the College of Humanities at the University of Arizona (UA) to integrate robust liberal arts study with pre-professional training. As of September 2024, PAH has 381 enrolled majors, the result of steady, significant growth year over year since its founding. The department has succeeded by meeting students halfway—quite literally—with a degree program that is essentially half humanities and half pre-professional training. This approach appeals to students who are not inclined to pursue a traditional major in a liberal arts discipline. By providing students with a clear career path based on their interests and demonstrating the value of the humanities for their chosen field, it enables more students to pursue a robust liberal arts education with confidence.

The department's success can also be attributed to its flexible structure, described in detail below. Designed to support collaborative partnerships across the university, the department has continued to generate integrative curricula. As students have flocked to the department, it has expanded outward through additional partnerships and tracks. To date, the department has established 11 distinct emphases: Business Administration, Engineering Approaches, Environmental Systems, Fashion Studies, Game Studies, Medicine, Plant Studies, Public Health, Rural Leadership and Renewal, Spatial Organization & Design Thinking, and Consumer, Market, and Retail Studies. These pathways were created through partnerships with many different colleges on campus, including the College of Agriculture, Life & Environmental Sciences; College of Architecture, Planning & Landscape Architecture; College of Engineering; Eller College of Management; College of Medicine-Tucson; Mel & Enid Zuckerman College of Public Health; College of Social & Behavioral Sciences; and the College of Information Science. Through these partnerships, the Department of Public and Applied Humanities has expanded the reach of the humanities at the University of Arizona. Ultimately, it will increase the humanities' impact on the industries its graduates enter.

# **Origins**

The backstory of the creation of the department begins when the College of Humanities (COH) responded to the restructuring of the university on a Responsibility Centered Management (RCM) budgeting model, under which individual colleges within the university are responsible for managing their own revenue and expenditures rather than having their budgets set by upper administrators. While the university as a whole recently suffered a significant budget crisis and is moving to a new budget model, COH was able to use the budgetary autonomy afforded under the RCM to revamp curricula.

"The budgetary autonomy afforded was what enabled the College of Humanities to make strategic investments that seemed impossible previously, including the development of PAH," observed Associate Dean of Research & Program Innovation Ken McAllister. "It's opened up new opportunities for meaningful collaboration. The humanities will survive—and thrive—by adapting, and doing so at UArizona has given us numerous opportunities to experiment and fund initiatives that we think signal the future of the humanities."

#### Structure

The budgetary autonomy extended to all colleges at the university through RCM made it easier for COH to form the mutually beneficial partnerships upon which the public and applied humanities curriculum is founded. COH has established transparent agreements with each partner college, in which each unit keeps the revenue from every course it contributes to the program, while COH and PAH receive additional revenue for administering the degree. Of the 42 credit hours students must take to complete the PAH major, 24 units are taught within the department, and 18 are taught by the partnering unit aligned with the student's chosen emphasis. PAH department head Judd Ruggill explained:

We know what each student credit hour is worth monetarily, as well as how much money departments/colleges receive for each major. And so the math is really easy for partners: "You receive the student credit hour money for the courses PAH majors take in your unit, we receive the major money to help us administer the degree and the student credit hour money for any courses we teach." Folks tend to be pretty happy with that arrangement because they end up getting more students (and thus more revenue) that they don't have to manage, as well as students that they wouldn't otherwise normally get (i.e., students who might choose a different major).

Ruggill makes a similar argument for why there haven't been major issues with PAH competing with other departments within COH: "The student who's interested in, say, majoring in Spanish, isn't typically going to be interested in applied humanities with a business administration emphasis. The student interested in religious studies isn't likely to be looking towards applied humanities with a fashion studies emphasis."

PAH designed a distinctive, thoroughly interdisciplinary curriculum to serve all students in the program, regardless of which of the 11 emphases they choose. Three core courses—"Introduction to Applied Humanities," "Applied Humanities Practice: Techniques and Technologies for Public Enrichment," and "Intercultural Competence: Culture and Identity"—double as gen ed courses, helping to recruit students to the major and streamline PAH majors' progress towards the degree. The rest of the curriculum consists of a mix of thematic and theoretical explorations of broad topics, such as "Living the Good Life: Humanities Perspectives on Culture and Community," "Humanities and the Global Creative Economy," and "Motorcycle Culture: Free Spirits, Easy Riders, and the Human Experience." Other courses focus on equipping students

with the skills needed to apply this learning, including "Innovation and the Human Condition: Learning How to Improve Life in the Community and Beyond" and "Memes: The Art and Craft of Microstorytelling."

Each course is designed to integrate a variety of liberal arts disciplines rather than focus on the instructor's discipline or specific expertise. "We designed our courses in such a way that anybody in the department could (and should be able to) teach them rather than have them be the domain of a specific person or specific perspective," says Ruggill. "And that's been really helpful because it's gotten faculty to think about each other and do some caretaking: 'I want to make sure that my colleagues can teach this as well, and know they'll do the same for me.'"

These courses become even more integrative as students contribute the knowledge and skills gained through their pre-professional training. Ruggill explained:

We get to create transdisciplinary spaces by design, as every core course has students from across the emphases. The students are, therefore, always working in diverse teams. Business administration students are often pretty different from fashion studies students, who tend to be different from game studies students, who are different from rural leadership and renewal students. And so they're learning not just from us, but from one another. They get to bring their specialization to the classroom and share it with interesting groups of people that they likely wouldn't connect with otherwise.

In this way, PAH courses integrate not only distinct liberal arts disciplines that contribute to the applied humanities curriculum but also the pre-professional training that students pursue parallel through the 11 emphases.

### **Outcomes**

Beyond the overarching emphasis on application, the curriculum also nurtures students' professional development throughout their time in college. Students proceed from a pre-internship course to an internship to a senior capstone that emphasizes the importance of regular and skillful reflection in building a fulfilling career. And indeed, PAH graduates are debunking misleading myths about humanities majors' job prospects by securing exciting jobs right out of college. Ruggill elaborated:

We have students being hired by physical therapy offices, technology incubators, engineering firms, social media influencers, design companies, public health offices. We even have students starting their own successful small businesses. If anything, our humanities students are proving to be highly employable, in just about any profession they choose.

By providing infrastructure for an expanding array of integration of humanities and pre-professional training, PAH has shifted perceptions concerning how the humanities contribute to students' professional success at UA. Much of this has to do with the response of the students themselves to the highly integrative educational experience facilitated by PAH. "They're excited and their excitement is contagious," says Ruggill.

In a decade when many humanities divisions have experienced decline, COH has grown at an impressive rate. In Fall 2010 (prior to the implementation of RCM), the college had 1,089 majors. As of Fall 2021, the college had 1,972 majors—an 81% increase, compared to an increase of approximately 15% for the undergraduate population as a whole. PAH has helped bring hundreds of these majors, but there is clearly a broader success story.

PAH can be seen as a significant part of a broader effort among COH administrators, faculty, and staff to adapt to address students' shifting student priorities. Across the board, they have developed greater capacity and confidence in articulating what the humanities offer students, personally and professionally, proudly proclaiming "Humanities = Jobs" in their outreach efforts and marketing materials. The building of the PAH department has helped to increase capacity for integration in COH writ large. It has produced pedagogical models for integrating disciplines within the college and illuminated approaches that traditional discipline-based programs can leverage to connect course content to potential professional applications.

More broadly, PAH has played an important role in fostering more engagement with the liberal arts at UA. It offers a promising model for other large public research universities, where the scale of the institution and emphasis on knowledge production tend toward greater specialization and siloing of different fields of study. In such contexts, the distribution of undergraduate programs across a number of distinct colleges and schools can make it seem overly arduous to create integrative degree programs that span these bureaucratic barriers. The PAH program shows not only that it can be done but also that it can be scaled up once a mutually beneficial partnership model is established. Finally, this case study illustrates how much liberal arts units on campus stand to gain from building these bridges to pre-professional programs.

# **Profiles**

At **Seton Hall University**, Abe Zakhem, professor of philosophy in the College of Arts and Sciences, and Elizabeth McCrea, associate professor of management in the Stillman School of Business, have created the Business Humanities Initiative with the goal of "integrating perspectives and approaches in the humanities, the liberal arts more broadly, and business to help cultivate ethical and effective leaders and create business practices that protect human dignity, contribute to human flourishing, and serve the common good." Zakhem and McCrea have received two NEH grants to develop courses and programs. In October 2023, they hosted a symposium focused on "innovative approaches to developing business humanities courses and developing a business humanities curriculum," with participants from a range of different schools, including both business schools and colleges of arts and science.

The Cultural Computing program in **Louisiana State University**'s Center for Computation & Technology (CCT) explores "how computational science technologies and infrastructures can benefit the arts, humanities, and social sciences." The program brings together students and researchers from fields such as computer science, music, linguistics, history, and anthropology to leverage computational tools and methods to understand, analyze, and create cultural artifacts. This can involve projects like using machine learning to analyze historical texts, developing interactive installations that blend art and technology, or even composing music with Al algorithms. Students can participate in the CCT's research through the multidisciplinary digital media minor, which "merges advanced computing technologies and engineering with creativity in visual, aural, and literary environments." The minor involves courses from CCT as well as disciplines across the university, including art, music, English, landscape architecture, mass communication, computer science, and electrical and computer engineering. Students collaborate on projects related to two broad research themes: "Intelligence and Responsive Systems" and "Collaborative Digital Media Art."

**Virginia Tech**'s Tech for Humanity initiative is elevating the profile of the humanities at a comprehensive technological university that is positioning itself as a leader in human-centered innovation. The university-wide effort is spearheaded by Sylvester Johnson, founding director of the university's Center for Humanities.

The initiative asserts the necessity of comprehensive education for ethical technological development and emphasizes the essential role of the humanities within this institutional mission. Under this banner, the Center for Humanities has launched a variety of initiatives that engage students (prospective and current), faculty, employers, and government officials. The center garnered a major grant from the Mellon Foundation to support the establishment of a Tech for Humanity pathways minor, which explores technology policy, inclusion and diversity, ethics of artificial intelligence, the impact of technology on democracy, and the role of social justice in making technology accountable to public interest. The center also created a summer institute to invite high school students to experiment with these humanistic approaches to technology. Finally, the initiative connects humanists to the technology industry through the university's D.C.-area-based innovation hub and a partnership with social entrepreneurship accelerator DoGoodX.

A collaboration between the Provost's office and the Dresher Center for the Humanities, the **University of Maryland, Baltimore County** (UMBC) Interdisciplinary CoLab provides students with a team-based three-credit (four weeks, 30 hours per week) paid internship in engaged humanities research. Interdisciplinary teams of undergraduate students work with a faculty member (drawn from a variety of disciplines) and a community partner organization to learn research methods, digital storytelling, research ethics, modes of analysis, and technical tools to produce public-facing final projects. Examples of collaborative partners have included Baltimore Green Space, UMBC Special Collections, the Baltimore Immigration Museum, Goddard NASA Visitor Center, Baltimore's Great Kids Farm, and Mid-Atlantic Regional Moving Image Archive. Core objectives of the program include giving students professional, interdisciplinary research experience while they learn to tell effective stories and amplify voices to the general public. This internship experience can be used as credit toward a minor in public humanities, which is offered within the Department of American Studies' Orser Center for the Study of Place, Community, and Culture but is open to all majors across disciplines.

The Common Problem Project (CP2) spans five **State University of New York campuses (Cortland, Oswego, Oneonta, Albany, and Plattsburgh)** and brings together faculty from different disciplines to work with community partners and identify real-world challenges of interest to all. Faculty then develop assignments for existing courses that allow students to work as an interdisciplinary team "to analyze or provide a solution to the problem." According to the program website, the goal of CP2 is "to have the teams develop a cross-disciplinary perspective that would hopefully add important dimensions to each of their efforts. The final assignment is for the teams to present their analysis or solution to the problem to the community partner for consideration." Film and environmental science students at SUNY Plattsburgh, for example, are collaborating on the Film and Sustainability project to produce films about local social and environmental problems. These SUNY campuses receive funding from the National Science Foundation, the Teagle Foundation, and the State University of New York to support CP2.

