To: JUCC and Provost Fung
From: Core Redesign Task Force
Re: Proposed UG Core Curriculum Model
Date: May 9, 2025

Introduction

Established in 2002, the Core Curriculum at USF has long served as the foundation of the undergraduate academic experience. In alignment with the 2027 Strategic Plan's Goal 1—to reimagine Jesuit education—USF launched a comprehensive review and redesign of the Core Curriculum starting in Fall 2023. This process is structured into three key phases: discovery, design, and implementation.

The first phase, Discovery, began in the 2023-2024 academic year with a focused effort to assess the current Core Curriculum. The Discovery Task Force, comprising faculty, staff, and librarians, led this initial effort. Co-chaired by a faculty member and an administrator, the task force played a central role in gathering insights and laying the groundwork for future phases. A full list of task force members can be found here.

The Discovery phase involved benchmarking against peer and aspirant institutions through a "window and mirror" approach, detailed in Section 3 of this report. The comprehensive findings and recommendations from Phase I Discovery are summarized in this report. The Discovery phase also developed a Core Value Statement to frame the redesigned core.

Core Value Statement

USF's core curriculum will empower you with the skills and tools necessary to thrive in your personal, professional, and intellectual journeys. We are a diverse community that cares for and respects one another; our classes facilitate listening to and learning from one another. Our faculty will mentor you in building bridges to your future calling.

Embodying the Jesuit tradition of liberal arts education, our core curriculum is designed to broaden your horizons, providing you a deeper understanding of our shared humanity and collective purpose to promote the common good. You will gain perspectives that have enduring value, no matter what field you pursue. The core curriculum expands the walls of the classroom by including fieldwork and engagement with communities in the city. You will access the unique global and local possibilities and networks offered by the San Francisco Bay Area, long a hub for invention and experimentation. In an age of accelerating change, the core prepares you to help shape the future, building up the world with confidence and hope.

The second phase, Design, dovetailed with the Discovery process and began spring 2024 through the 2024-2025 academic year. Goals of this Design phase included:

- Review and consider the feedback from Phase I Discovery Task Force.
- Participate in workshops and trainings designed to equip the task force for its work
- Develop Core Learning Outcomes that articulate the purpose of a USF Core Curriculum.

- Create a new Core Curriculum model that upholds the committee's charge and the guidelines and principles outlined in the Strategic Plan working group recommendations including but not limited to a distinctive Jesuit education that equips students for success beyond their undergraduate studies.
- Work with the Joint University Curriculum Committee and others stakeholders throughout the design process to engage the community about the future Core
- Propose a redesigned Core Curriculum model to the Joint University Curriculum Committee for review and recommendations.

The Design phase task force was composed of faculty, staff, librarian, and students. The full list of members can be found here.

Design Process

The 25-member Core Curriculum Redesign Task Force embarked on the design phase with a review of the report from the discovery phase and a kick-off meeting in May 2024 that included a session on design thinking and summer reading on *General Education Essentials: A Guide for College Faculty* by Paul Hanstedt,. In August, the task force gathered for a two-day Core Curriculum workshop provided by the American Association of Colleges and Universities. Led by Drs. Kate Drezek McConnell and Tia Brown McNair, we discussed such topics as high-impact educational practices, designing for equity and inclusive excellence, program-level assessment, and strategies for facilitating institutional change. Building from the core vision statement generated in Phase I, and working both in subgroups and as a full task force, the task force prepared to brainstorm and develop a draft of Core learning outcomes, operationalize those outcomes into possible Core Curriculum structures, and then refine those into a proposed model.

Throughout the fall 2024 semester, the task force made significant progress, including the development of a working draft of Core learning outcomes aimed at fostering key skills and knowledge, tied to Jesuit values, that ensure students are equipped for both academic success, post-graduation opportunities. As the task force started brainstorming ideas and potential models for a redesigned Core Curriculum, a key focus was on ensuring high-impact practices and experiential learning opportunities where students learn and develop skills while tackling real-world problems was integrated into the model. Additionally, the task force explored innovative structures to ensure a seamless transition for first-time first year and transfer students that support learning outcomes and time to degree completion.

Based on the findings from Phase I Discovery and ongoing research of different Core models, the task force broke into three subgroups, each working on drafting a Core model that supports the Core learning outcomes and incorporates an initial year experience, high-impact practices, and experiential learning opportunities. The three subgroups shared their Core models with each other and engaged in a collaborative discussion identifying initial convergences across each model, beginning with first-year experiences. The task force engaged in an iterative approach, both in the development of learning outcomes and possible redesign models.

At the conclusion of the fall, the task force arrived at a consensus in shaping an Initial Year Experience that provides students with a meaningful and engaging academic foundation. This Initial Year Experience composed of a humanities-focused "transformative texts" course and an interdisciplinary, experiential "Golden Gateway" course using the San Francisco Bay Area as a learning environment. This component of the Core redesign work focused on developing a signature initial year experience that incorporated development of core learning outcomes, high impact practices, student belonging, experiential learning, interdisciplinary learning, and engagement with the broader San Francisco community.

At the start of spring semester, the task force ideated around the "middle" (years two and three) and a final year (or near final year) experience. Again, the task force iterated over 12 different models at this point that supported the Core value statement and findings from the discovery phase.

By March, the task force was ready to share two proposed models for the Core Curriculum Redesign and invited the community to engage in the iterative process. These three community sessions were held to share the models and engage in discussion and feedback:

Core Redesign Community Session (in person)
March 25 (Tuesday), 11:45 AM – 12:45 PM Fromm Hall 125 - Maraschi Room

Provost's Chat & Chai: Core Redesign
March 26 (Wednesday), 4:00 – 5:00 PM Faculty/Staff Lounge, McLaren 250

Core Redesign Community Session (zoom)
March 28 (Friday), 2:00 – 3:00 PM

The proposed two models were designed with a few parameters in mind:

- The Provost requested a 36-credit Core.
- Each of the courses in the model was assumed to be 4 credits.
- The models proposed were "hybrid" models, meaning a blend of a purely integrative core curriculum model and a pure distribution model. According to research from AAC&U, 49% of General Education models are hybrid models.
    - The first model presented was a Hybrid 2-7 model, which meant two 4-unit courses were integrative courses and seven 4-unit courses were distributive.
    - The second model presented was a Hybrid 3-6 model, which meant three 4-unit courses were integrative courses and six 4-unit courses were distributive.
    - Integrative courses are generally inter/cross-disciplinary with competencies that are not discipline-specific. Distributive courses are discipline specific with disciplinary competencies.
- Foreign Language requirements are outside the scope of the work of the core redesign and will continue to be determined by individual colleges/schools.

The two models presented to the community can be found here on the Core Redesign website. A recording of the presentation can also be found here.

Community Engagement and Feedback

The three community sessions were attended by over 200 faculty, staff, and librarians and two separate sessions were held with students, one through ASUSF. In addition to the feedback at the community sessions, the community was invited to provide feedback on their preferred model through a feedback form and include any changes they would like to see in the next iteration of a core model. The form was completed by approximately 120 respondents.

Based on the feedback form, the community's preference was for Model II: 3 integrative courses and 6 distributive courses (61.2%) versus Model I: 2 integrative courses and 7 distributive courses (24.5%).

Task Force Iterating (again)

The task force reviewed the community and Provost feedback, including recurring themes that emerged from the responses. With a stronger preference for the 3-6 model, the task force spent the next month iterating within the structure of the 3-6 model and responding to key areas that were of importance to both the community and Provost.

Proposed Redesigned Core Model

The proposed final core redesign model includes several updated elements from the original 3-6 model that was shared with the community.

The design retains the three Core Integration courses, two in the first year and one in the last three semesters, which were strongly supported in the community feedback we received, as well as by the Provost. We feel strongly that the proposed model addresses our collective priorities that both the Provost, the task force, and the community identified as needing further attention from the previous model: distinctive Jesuit education (including ethics, philosophy, and theology/religious studies), core humanities education, communication literacies, and quantitative literacies (as distinct from scientific inquiry) by: transforming the Transformative Texts class into an Enduring Questions class; adding a Communication for the Common Good class to the initial year course requirements; adding ethics to the Theological Inquiry distribution; and adding a Quantitative Literacies distribution area.

A general draft mapping of Core Learning Goals to components of the model can be found Appendix A: Core Learning Goals. However, the task force recommends development of Core Learning Outcomes and alignment with the goals.

Proposed areas that could teach are listed next to each component of the model:

Golden Gateway Initial Year Courses

Enduring Questions: *Philosophy, Theology & Religious Studies, History, English*

City as Classroom: *Open to any discipline*

Communication for the Common Good: *Rhetoric and Language*

Bridge to Exploration

Creative Expressions: *Performing Arts, Art & Architecture*

Historical and Cultural Inquiry: *English, History, LLC/Languages, Literature and Culture*

Theological and Ethical Inquiry: *Theology & Religious Studies and Philosophy*

Scientific Literacy: *Natural and Laboratory Sciences (Biology, Chemistry, Physics, Environmental Science, Neuroscience, Biotech & Entrepreneurship, Kinesiology)*

Quantitative and Computational Literacy: *Math, Computer Science, Data Science, Engineering*

Global and Local Society: *Communication Studies, Economics, Media Studies, Sociology, Political Science, Psychology, Public Health*

Integration Core Seminar

Applied Problem Solving: *Open to any discipline* **Initial Year Golden Gateway**

The updated *Golden Gateway* model for the initial year experience reflects a deepened commitment to our Jesuit mission, the intellectual traditions of liberal education, and the San Francisco Bay Area as an active learning environment. In addition to the two integrative courses, *Enduring Questions* and *City as Classroom*, a third course on C*ommunication for the Common Good* has been included as a foundation course to our incoming students.

This initial year three course, two-semester sequence provides all initial year students a grounding in a shared, values-centered, Jesuit academic experience that introduces them to critical skills and competencies, and engages them through high-impact practices. As anchors in the redesigned core, these propose a signature initial year experience that reflects the USF's distinctive commitments to cultivating ethical reasoning through exposure to enduring human dilemmas, leverages our unique location in the Bay Area as a living lab of civic learning and community engagement, and develops students with rhetorical agility, multimodal fluency, and justice-oriented communication skills. Our students have the unique opportunity to begin their academic journey with a shared foundation rooted in our values: inquiry, reflection, equity, and action.

Enduring Questions: Grounding Students in Jesuit Intellectual Tradition and Humanistic Inquiry

This course has been updated from a *Transformative Texts* course to an *Enduring Questions* course that invites students to wrestle with the foundational philosophical and ethical inquiries that animate the human condition and shape our collective pursuit of justice, meaning, and community. By engaging primary texts and artistic works from across time and cultures, students explore themes such as justice, love, freedom, truth, and the good life—questions central not only to the Jesuit tradition but to all reflective lives.

This interdisciplinary course fosters intellectual habits essential to liberal education: close reading, analytical writing, cross-cultural dialogue, and ethical reflection. Students encounter the enduring complexity of human experience and are invited to locate their own voices within an ongoing, shared conversation that transcends academic disciplines. In doing so, they build a durable framework for interpreting future learning and engaging with a pluralistic world.

Language, Identity, and Power: Communication for the Common Good

Now moved from the Bridge to Exploration in the previously shared 3-6 model in March, *Language, Identity, ad Power: Communication for the Common Good* serves as an introductory, gateway course exploring the complex relationships among language, identity, power, and society, by encouraging students to examine how communication practices are shaped by social and systemic factors such as race, class, gender, and policy. Guided by three central questions, the course invites critical reflection on the role of technology, genre, and modality in shaping

communication, while emphasizing the real-world consequences of language use in academic and professional settings. Rooted in the Jesuit value of *eloquentia perfecta*, students develop rhetorical awareness and communication skills—written, oral, and multimedia—through individual and collaborative work aimed at addressing diverse perspectives and social contexts.

Positioning this course in the initial year is critical and recommended by the Provost to ensure students begin their journey at USF developing these competencies.

City as Classroom

There are no changes in this proposed model to City as Classroom.

A fuller description of these can be found in Appendix B: Initial Year Golden Gateway courses.

Bridge to Exploration

The updated model relocates philosophical inquiry from *Bridge to Exploration* to the *Golden Gateway*, through the requirement of the *Enduring Questions* course, which provides a distinctive philosophically-driven foundation for all initial year students. Philosophical disciplines also may be found in the Theological and Ethical Inquiry exploration area.

After community feedback and task force discernment, the task force unanimously agreed that the revised core model needed a requirement in Quantitative and Computational Literacy. While this additional requirement would increase the credits of the revised core proposal from 36 semester credits to 40 credits, an additional 4 credits beyond the Provost's charge to design a 36 semester credit Core, we are requesting that the Provost consider this change.

This additional Quantitative and Computational Literacy requirement develops essential skills in problem-solving, critical thinking, and AI literacy, preparing students for the demands of modern life and 21st-century careers. These applied, interdisciplinary courses—ranging from creative coding to data science—give students hands-on experience with real-world challenges while fostering digital fluency and ethical awareness. Grounded in technology and informed by ethical reflection, the curriculum equips students from all majors to analyze data, build algorithms, and make responsible decisions in a world shaped by intelligent systems. A fuller description of this course can be found in Appendix C Quantitative and Computational Literacy.

Final Core Integration Course: Applied Problem-Solving

This course type remains unchanged in the proposal. A description of this course was previously shared in our community sessions and can be found in Appendix D Core Integration Course: Applied Problem-Solving.

Summary

The task force's goals this year in Phase II of the Core Redesign was to design a Core model that reimagined Jesuit education and responded to the findings of Phase I, and propose a

redesign Core model that garnered group consensus. The task force achieved these goals and reached consensus with 20 votes in agreement to move the proposal forward, 2 votes in disagreement, and 1 vote in abstention. The two members who were in disagreement expressed that their dissent was due to the lack of two distinct requirements for Philosophy and Theological and Religious Studies.

Overall, task force is proud of the work that was accomplished this year to design a Core Curriculum that upholds the Core Value Statement :

USF's core curriculum will empower you with the skills and tools necessary to thrive in your personal, professional, and intellectual journeys. We are a diverse community that cares for and respects one another; our classes facilitate listening to and learning from one another. Our faculty will mentor you in building bridges to your future calling.

Embodying the Jesuit tradition of liberal arts education, our core curriculum is designed to broaden your horizons, providing you a deeper understanding of our shared humanity and collective purpose to promote the common good. You will gain perspectives that have enduring value, no matter what field you pursue. The core curriculum expands the walls of the classroom by including fieldwork and engagement with communities in the city. You will access the unique global and local possibilities and networks offered by the San Francisco Bay Area, long a hub for invention and experimentation. In an age of accelerating change, the core prepares you to help shape the future, building up the world with confidence and hope.

Remaining Questions, Next Steps, and Recommendations

In preparation for the next redesign Phase III: Implementation, the task force presents the following recommendations regarding the structure and implementation of the Core:

Questions:

- Does the double-dipping parameter need adjusting? Consider whether there needs to be a double-dipping parameter for minors?
- The integrative courses are meant to be interdisciplinary or transdisciplinary. How do we make that happen operationally?
- Are there any Core requirements that *must* be taken at USF (cannot be a transfer course, AP/IB course, study abroad course, etc). The current Core requires the Core A2-Writing and CEL requirements to be taken at USF. Do we still need to have this requirement in place and what impact might that have on transfer students?
- Will students be required to complete a minimum of 40 units in the Core? If they can transfer in an equivalent course that is 3 units or 2.68 units, do they still have to complete an additional Core class to meet the 40 units? The current Core does that. Students have to complete additional Core classes to meet the minimum 44 units.

Next steps:

- Generate Core Learning Outcomes based on the five Core Learning Goals

- Specify learning objectives for each of these course types and ensure course designations and approvals for each area are determined by the learning outcomes

Recommendations:

- Provide administration support for co-teaching in interdisciplinary courses
- Consider renaming the Bridge to Exploration area of "Theological and Ethical Inquiry" to "Theological, Religious, and Ethical Inquiry" or "Religious and Ethical Inquiry," to align with the disciplinary and training distinctions between Theology and Religious Studies
- Consider the role of “turf policy” in implementation
- Consider touchpoints for student involvement in the Core to enable opportunities for purposeful connections between the courses and articulate the value of the Core experience (e.g., annual core colloquium akin to CARD)
- Develop an approach for assessing the new Core
- Continue our commitment to sustain and strengthen Community Engaged Learning, as recommended in Phase I report
- Continue reviewing the effectiveness of the Cultural Diversity designation, as recommended in Phase 1 report, and consider building cultural diversity into Core learning outcomes

Appendix A: Core Learning Goals Draft Mapping

Core Learning Goals Draft

1. Communication and Collaborative Engagement: Rooted in the Jesuit tradition of *eloquentia perfecta*—the art of communicating with wisdom and integrity for the common good—students develop clear, empathetic, and purposeful communication across diverse contexts. They demonstrate strong written, oral, and interpersonal skills, engage in collaborative processes, and navigate cultural differences with respect and adaptability to foster mutual understanding and meaningful cooperation.

2. Scientific Reasoning, Information Literacy, and Data-Driven Problem Solving: Inspired by the Jesuit commitment to infinite truth, goodness, and beauty—"finding God in all things"—students develop rigorous inquiry in service of knowledge and the common good. They apply scientific, mathematical, and computational reasoning, along with media, digital and data literacy, to critically analyze complex problems, make informed decisions, and promote ethical and responsible innovation.

3. Critical Inquiry, Reflection, and Ethics: Grounded in *cura personalis*—care for the whole person—students critically engage with historical, philosophical, literary, and theological traditions. They examine fundamental questions of meaning, values, justice, and the human condition, developing intellectual and moral discernment for ethical engagement in an interconnected world.

4. Global and Local Citizenship: Rooted in the Jesuit commitment to becoming "people for others" (*homines pro aliis*), students develop the knowledge and skills necessary to analyze social structures, engage with diverse communities, and advocate for justice. Through experiential learning, including community initiatives and internships, they apply ethical reasoning, cultural awareness, and evidence-based approaches to address systemic inequities and promote the common good in both local and global contexts.

5. Creative Expression and Innovation: Grounded in the Jesuit commitment to *magis*—the pursuit of greater meaning and excellence—students integrate reason, imagination, and emotion to create and innovate. Through projects, performances, or designs, they explore complex ideas, engage ethical considerations, and develop transformative solutions for a rapidly changing world.

	Enduring Questions	City as Classroom	Communication for the Common Good	Creative Expressions	Historical and Cultural Inquiry	Theological and Ethical Inquiry	Scientific Inquiry	Global and Local Society	Quantitative and Computational Literacy	Integration Seminar
Communication and Collaborative Engagement	X		X	X		X		X		X
Scientific Reasoning, Information Literacy, and Data-Driven Problem Solving			X				X		X	X
Critical Inquiry, Reflection, and Ethics	X	X	X		X	X	X			X
Global and Local Citizenship		X	X		X			X		X
Creative Expression and Innovation		X		X						X

Appendix B: Initial Year Golden Gateway courses

In order to foreground all incoming initial year students in our distinctive Jesuit education, that highlights our Bay Area location and strength in experiential learning, the two-semester Golden Gateway includes three courses: a City as Classroom course, an Enduring Questions course, and a Communication for the Common Good course.

Enduring Questions

This course introduces first-year students to foundational philosophical inquiries, rooted in Jesuit values, that have shaped human understanding across time, geography, and cultures. Students engage with primary texts and works of cultural significance—from classical philosophy to literature, visual art, and historical thought–that examine enduring questions regarding justice, freedom, beauty, love, truth, identity, and the nature of a good life. Grounded in philosophical traditions of argument, interpretation, and reflection, this interdisciplinary course invites students to explore how different disciplines wrestle with similar fundamental concerns and prepares students to articulate their own responses to questions through their encounter with the richness of multiple perspectives. These courses encourage integration of perspectives, including Philosophy, Theological and Religious Studies, English, History, Literature, and other humanistic fields. Emphasis is placed on close reading, analytical writing, and dialogue across differences as students develop the ethical habits of mind rooted in liberal education.

Draft Learning Outcomes:

- Engage deeply with primary texts that pose significant philosophical and humanistic questions.
- Analyze and compare how different disciplines approach enduring human concerns.
- Practice critical reading, analytical writing, and collaborative discussion.
- Reflect on one's own values and beliefs in relation to broader ethical and philosophical traditions.

Sample Courses:

- What is a Good Life? Wisdom from Ancient and Modern Thinkers
- What is Justice? Philosophical and Literary Perspectives
- What Does It Mean to Be Human? Perspectives from Science and Religion The Good Life: Wisdom from Philosophy, Literature, and the Arts
- Human and Machine: Identity and Consciousness in the Digital Age

City as Classroom

This course introduces initial year students through an interdisciplinary approach that uses the San Francisco Bay Area (or the locales surrounding other USF campuses) as an active learning space. Blending experiential learning, research, or creative projects with classroom preparation and reflection, students will engage with the city through observation, site visits, and analysis, using the city as a living case study. City as Classroom courses encourage different modes of collaborative engagement, including historical research, creative work, and data analysis. Example course themes could include environmental justice, technology and society, public health, or urban inequality.

Draft Learning Outcomes:

- Apply analytical or creative skills to interpret San Francisco's (or other locale's) social, cultural, or environmental landscape through multiple perspectives.
- Develop independent or small-group projects based on fieldwork, research, or creative exploration.
- Demonstrate critical thinking by synthesizing urban experiences with scholarly perspectives.

Sample Courses:

- Mapping Environmental Futures: Climate Change and San Francisco
- The City and the Body: Public Health, Space, and Access
- Creative Cities: Art, Music, and Innovation in the Bay Area

Language, Identity, and Power: Communication for the Common Good

Gateway sample course

NOTE: This course is rooted in “introductory” terms in order to avoid over-promising “proficiency” since it is a “gateway” class. We are planting seeds and offering heuristics that are usable (transferable) in multiple learning/writing/speaking contexts.
Course Description:

Three central questions will guide our studies this semester:

1. How are language, identity, power, and society connected to each other?
2. How do technology, genre, and modality intersect with language and communication?
3. Why should college students understand these connections?

The way we speak and write is deeply connected to who we are socially. Our language practices are influenced by many aspects of our identities—including our race, social class, gender, cultural background, where we live, and our immigration history. Language is also shaped by larger systems like government policies and mainstream social beliefs.

In this course, we will look critically at how power works through language and how attitudes about language (including our own unconscious biases) impact our communication practices. As college students, understanding these connections is especially important because the ways we communicate in academic and professional settings can have “real” consequences.

When we engage with academic language, we're not just using specialized vocabulary—we're participating in complex social systems that affect both our educational experiences and ourselves.

In this course, students explore how language influences values, beliefs, and actions. This course emphasizes the development of rhetorical knowledge and power. Students develop their voices in crafting written, oral, and multimedia communication for specific purposes and audiences. Pursuing the Jesuit value of *eloquentia perfecta*–speaking and writing for the common good–students work both independently and collaboratively to understand and address diverse perspectives and rhetorical situations.

Learning Outcomes:

NOTE: We also realize that, optimally, a course would be limited to 4-5 LOs. However, we include additional LOs here to indicate the various concepts and skills that we plan to explore - actual LOs would be refined during the development phase.

Information, media, and AI literacy

- Identify, evaluate, and synthesize information from a variety of scholarly and popular sources
- Critically analyze public media, including news and social media, for bias and veracity.

- Understand, engage, and critically reflect on applications of generative AI to communication processes

Civic communication literacy

- Understand the role of language in fostering or inhabiting citizen agency, civic engagement, and collective action
- Practice listening to, and engaging in, civil discourse from multiple and sometimes conflicting perspectives, including but not limited to, ethnically and racially diverse voices and perspectives

Language ethics and discipline-specific awareness

- Examine the role of language attitudes and standards in empowering, oppressing, and hierarchizing languages, their users, and their audiences
- Identify, analyze, and critique communication norms and biases within and across specific fields and contexts
- Compare/contrast composition and interpretation strategies between academic and public genres and modalities

Rhetorical communication

- Identify and evaluate the relationship between communication strategies and the rhetorical situation (considering purpose, author, audience, and context)
- Apply rhetorical principles to design and implement persuasive strategies in multiple modalities (oral, written, digital)
- Reflect on and evaluate the effectiveness of their own rhetorical choices and processes

Major Assignments upon request, but we would intend to assign at least 1 written, 1 oral, and 1 digital project, incorporating research, analysis, and argument.

Appendix C Quantitative and Computational Literacy

A Quantitative Category in the New USF Core Rationale

Quantitative* courses teach critical thinking, deductive reasoning, problem solving skills, technical proficiency, and AI literacy. These skills are valuable in every-day life and vital to preparing students for 21st century employment: problem-solving is #1 and tech skills #6 in the attributes employees look for in the 2025 NACE employment outlook. A quantitative requirement is a standard component of nearly every university's core curriculum.

We envision core courses in quantitative literacy from Math, Computer Science, Data Science, and Engineering, as well as many other disciplines. The courses will be applied in nature and provide students with hands-on experience using technology to address real-world challenges.

One example course is CS 107, recently renamed *Creative Coding and AI*, which is part of the current core's Area B Math and Quantitative Sciences. In this course, students use AI and visual programming tools to design software and generative AI applications. Along the way, they are introduced to foundational concepts in AI literacy and ethics while developing problem-solving skills in new and engaging ways.

Another example is data science courses tailored to specific application areas, where students analyze real-world datasets and develop data-driven solutions. These courses not only build fluency in coding and data analysis but also foster critical thinking about the ethical and social implications of working with data.

These applied, interdisciplinary courses will equip students from all majors with the digital fluency needed to thrive in a world increasingly shaped by data, algorithms, and intelligent systems.

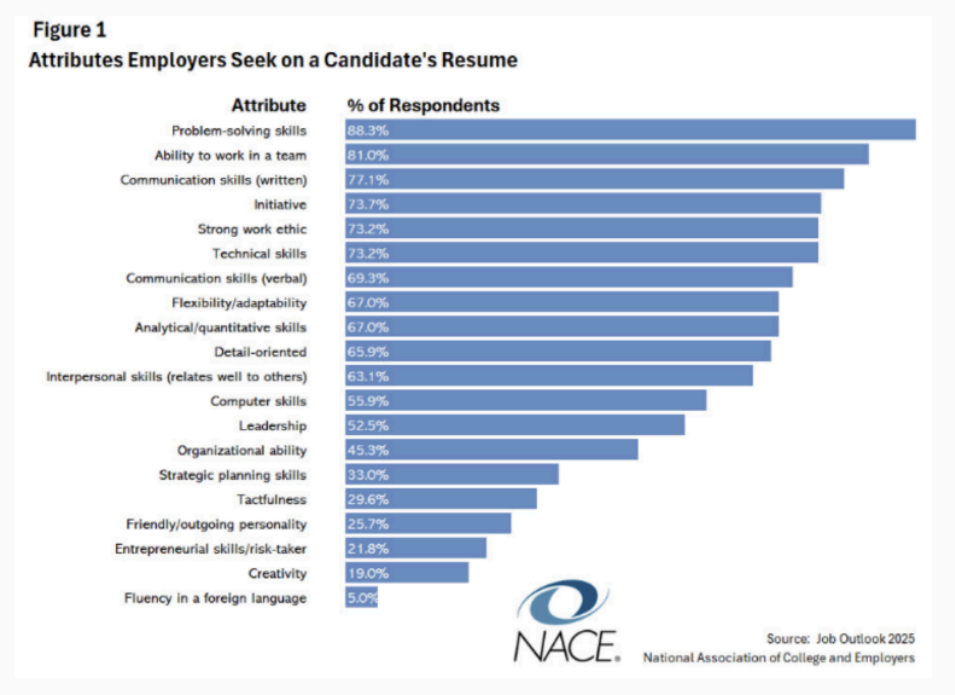
Learning outcomes for the quantitative category include:

- **Apply quantitative and algorithmic methods** to represent and solve real-world problems across various domains.
- **Interpret and communicate mathematical, statistical, or computational results** clearly and effectively using appropriate language, symbols, and tools.
- **Analyze data or abstract structures** using models, logic, or code to draw meaningful conclusions or predictions.
- **Evaluate the limitations and assumptions** of quantitative or algorithmic approaches in solving complex or uncertain problems.
- **Demonstrate proficiency in using relevant technologies** (e.g., spreadsheets, programming languages, statistical software, AI tools) to support analysis and

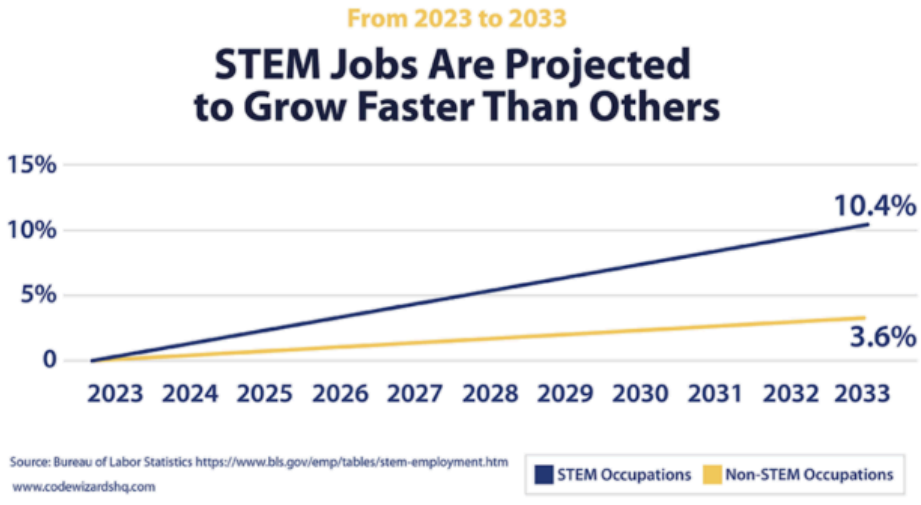
decision-making.

- **Reflect on the ethical and societal implications** of algorithmic systems, AI, data-driven decisions, and quantitative claims.

**Note: We refer to the category here as "quantitative" for brevity but the committee is considering various titles including "Quantitative and Algorithmic Literacy", and "Quantitative and Computational Literacy".*



- **STEM jobs are projected to grow 10.4%** between 2023 and 2033, compared to 3.6% in non-STEM jobs. (Bureau of Labor Statistics, 2024)



Appendix D Core Integration Course: Applied Problem-Solving

These interdisciplinary, applied problem-solving courses challenge students to analyze and respond to real-world issues through research, innovation, and creative expression. Students integrate multiple perspectives—scientific, ethical, historical, artistic—to develop solutions that are both evidence-based and imaginatively engaging.

Key Elements:

1. **Interdisciplinary Analysis** – Understanding problems from scientific, social, ethical, and creative perspectives.
2. **Applied Research & Innovation** – Designing and testing solutions through iterative methods, including speculative thinking.
3. **Creative & Expressive Approaches** – Incorporating artistic and humanities-based perspectives into problem-solving.
4. **Ethical & Systems Thinking** – Considering the cultural, historical, and ethical dimensions of solutions.

Key Learning Outcomes:

● Analyze complex societal problems using interdisciplinary frameworks. ● Develop and evaluate evidence-based, ethical, and creative solutions. ● Communicate findings through diverse mediums, including research, narrative, and visual storytelling.

Sample courses:

- Rethinking the Tech Boom: Innovation, Ethics, and Equity
- Climate Crisis and Urban Futures: Adapting Cities for a Changing World
- Food (In)Security in an Age of Abundance