The Inquiry Core Curriculum

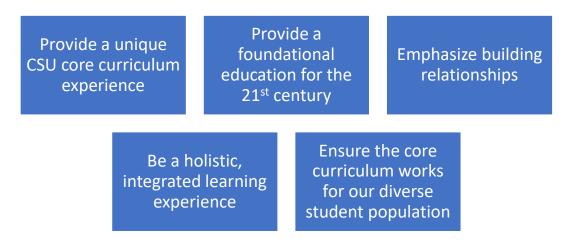
Developing Inquiring Minds | Sparking Curiosity | Building Professional Presence

Overview

Built around the development of nine Core Competencies, students will complete 36-credit hours of coursework across a variety of disciplines. Each course will engage students in exploring important questions and problems, introducing them to the methods and standards of the discipline along the way and assessing their experience with signature assignments. **Inquiry Pathways** provide a further opportunity for students to deepen their understanding of an important issue and strengthen a sense of community with their peers by completing three core courses around a shared theme.

Guiding Principles

In 2022 CSU's Faculty Senate initiated a review and update of the general education system. Members of the initial Spring 2023 committee created the following guiding principles for the revision process.¹



The Core Competencies

A Core Curricular education should prepare all students for success in life and whatever career(s) they pursue after graduation. The Inquiry Core is designed around nine core competencies that reflect the demands of modern life and the skills most in demand among employers. With the Inquiry Core, CSU is promising that all students who complete the program will be...

- 1. Effective written communicators
- 2. Effective oral communication
- 3. Critical quantitative reasoners fluent in interpreting and using data
- 4. Efficient and ethical consumers and creators of information
- 5. Sophisticated users of digital technologies
- 6. Professional and constructive collaborators
- 7. Ethically conscious and responsible decision-makers

¹ For a complete list of ad hoc committee members and an overview of the curricular review process see Appendix D.

- 8. Culturally aware and civically minded members of local and global communities
- 9. Critical and creative thinkers

Each of these core competencies describes, at a high level, the learning outcomes of the Core Curriculum. Each is also further specified with sub-outcomes, derived from state guidance, <u>AAC&U</u> rubrics, and current research.

These Core Competencies update the existing GenEd 08 skill areas and unify them with the broader statement of the purpose of general education at CSU.

Core Curriculum courses will feature a signature assignment that assesses one or more of the core competencies outlined in the new curriculum.

The CSU Core Curriculum Framework

The CSU Core Curriculum is a reimagining and updating of the general education system at Cleveland State University. It aims to provide a foundational education for all CSU students, organized around a minimum of 36 credit hours, divided into two categories: Foundations of Inquiry and Methods of Inquiry. Each category 2 course will include critical thinking as a core competency.

With the various ways of embedding or replacing requirements in the Core, the minimum credit hours of courses outside of major requirements would be 15.

Requirement	OT36 Alignment	Core Competencies				
Category 1: Foundations of Inquiry						
Inquiry Launch	Any	First Year Seminar,				
		Collaboration				
Finding Your Voice	First Writing	Written Communication				
Research & Professional	Second Writing	Written Communication,				
Writing		Information Literacy				
Quantitative & Formal	Mathematics, Statistics, and	Collaboration, Quantitative				
Reasoning	Logic	Reasoning				
African-American History &	Diversity, Equity, Inclusion	Intercultural Knowledge				
Culture	and Arts & Humanities or					
	Social and Behavioral Science					
Category 2: Methods of Inquiry						
Human Culture & Creativity	Arts & Humanities	Collaboration, Written or Oral				
		Communication				
Global Human Perspectives	Arts & Humanities	Intercultural Knowledge,				
		Written or Oral				
		Communication				
Scientific Investigations	Natural Science + lab	Collaboration, Quantitative				
		Reasoning				
Nature & Technology	Natural Science	Quantitative Reasoning,				
		Information Literacy				
Society & Human Behavior	Social and Behavioral Science	Collaboration, Information				
		Literacy				
Diversity in Society	Diversity, Equity, Inclusion	Intercultural Knowledge,				
		Written or Oral				
		Communication				
Data & Digital Literacy	Mathematics, Statistics, &	Digital Literacy and/or				
	Logic <u>or</u> Social and Behavioral	Quantitative Reasoning,				
	Sciences	Collaboration				

Inquiry Pathways

A central goal of the Core Curriculum is to help students develop the ability to assess and solve problems using diverse methods. Any student completing their core curriculum at CSU should be able to do this, but we are also introducing the option for students to complete part of their core through a series of courses investigating a similar topic or theme.

Core Curriculum courses may be included in one or more *Inquiry Pathways*. These pathways are organized around important themes and provide students an opportunity to explore that theme from multiple disciplinary perspectives.

Students completing *at least three* of their core courses in a single Inquiry Pathway will have that success indicated on their transcript, somewhat equivalent to a certificate. Students will not be required to complete courses within a pathway.

An initial set of pathways will be constructed by the Core Curriculum Director based on input from faculty. Over time, faculty are encouraged to suggest pathways, composed either of existing core curricular courses or that would require the creation of new courses, and the Core Curriculum Director should regularly review existing core curricular offerings to identify where pathways may already exist.

Having a course included in a pathway will simply require a statement of the course's connection to the pathway. Programs are encouraged to consider potential pathways that would be of particular interest to their students.

Writing Across the Curriculum

Writing Across the Curriculum courses will remain a key component of the CSU curricular experience. CSU students will be required to take two WAC courses at any level. At least one WAC course should be part of the major program of study, but not be a capstone course. WAC courses are outside of the 36 credit core curriculum requirements.² The directors of Writing Across the Curriculum, First Year Writing and Core Curriculum will work closely to create unified vision of writing instruction throughout the core curriculum and WAC courses.

Looking Ahead: Course Design

Inquiry pathways and professional skills should focus on core competencies.

All core curriculum courses must be designed with an *inquiry orientation* and include at least one *signature assignment*. Additionally, faculty are encouraged to incorporate additional *high impact practices* to promote student learning.

Inquiry Orientation

The Inquiry Orientation is inspired by Inquiry-Based Learning, a high impact instructional strategy. For the purposes of the core curriculum, an Inquiry Orientation means two main things:

² https://www.csuohio.edu/writing-center/wac-requirements

- 1. The course should be organized around big questions and/or problems that would be engaging to the students. The content and methods included in the course should be included to help students investigate those questions and/or problems.
- 2. The course should include ample opportunity for students to engage in some of the stages of inquiry. In practice, this means providing time in class for students to do the investigating and/or problem solving.

The overarching goal of the Inquiry Orientation is to *spark student curiosity* with the questions/problems and develop their *inquiring minds* by directing them to engage in inquiry rather than be passive recipients of information.

More information about the Inquiry Orientation and Designing for Inquiry is provided in Appendix E.

Signature Assignments

Every course in the core curriculum will be required to include at least one *signature assignment* which emphasizes the designated learning outcomes.

Signature assignments are authentic assignments that most represent our aspirations for student learning in the course by engaging students in real-world application of knowledge. They also always include a reflection element that prompts students to draw connections between what they did in the assignment (and the course more broadly) and the specific core competencies. In this way, signature assignments function both as artifacts students may use elsewhere in their lives and as a way of "making thinking visible" by drawing explicit links between the work and what it demonstrates.

The precise contours of a signature assignment are left to the instructor. They may take the form of an essay, lab report, website, presentation, artwork, creative writing, the product of a group project, or anything else that fits the bill as a meaningful, real-world application of knowledge. This does mean that exams and other similar assignment types are not signature assignments.

The reflection component of the signature assignment is aimed at promoting student metacognition and making their thinking visible to them. This approach has been shown to greatly enhance learning and make it stick. Once again, there will be no precise requirement for what the reflection should look like. However, resources and potential prompts will be made available for use.

There is no requirement that signature assignments be the "most weighted" assignment in the course. Although it should be part of the student's overall course grade, it is left to the instructor to determine how it fits into that grade.

Instructors will be required to submit signature assignments to the Core Curriculum Director for the purposes of assessment.

Assessment

A Core Curriculum assessment program will be established by the Directors of Core Curriculum and Research & Assessment. Assessment, in this context, refers to a set of activities that measure, analyze, and evaluate student learning to gauge achievement of stated student learning outcomes. Meaningful assessment is the catalyst for the continuous improvement of the underpinnings of students' educational experiences.

Assessment in the Core Curriculum will be aimed at improving the core curricular educational experience for students. Since no single course or instructor is responsible for achievement of learning across the core curriculum, the use of assessment data as evidence of instructor performance is strictly prohibited.

Core curriculum assessment should be focused on the *Core Competencies* and should make use of the *Signature Assignment* completed in each core curricular course as the basis for that assessment.

Given the complexity and time commitment required for the assurance of learning of the nine core competencies, a rotating and staggered assurance of learning plan should be used. The assessment plan should include three main components:

(M): Measurement of student learning, via the collection, evaluation, and reporting of outcomes

(R): Reporting of assessment data and recommendations for continuous improvement

(CI): The development, implementation, and reporting of continuous improvements

	F26	S27	F27	S28	F28	S29	F30	S 31	F31	S32	F32	S33
Written Comm	M1	R1	CI	CI	M2	R2	-	-	M1	R1	CI	CI
Oral Communication	M1	R1	CI	CI	M2	R2	-	-	M1	R1	CI	CI
Quantitative Reasoning	M1	R1	CI	CI	M2	R2	-	-	M1	R1	CI	CI
Information Literacy	-	-	M1	R1	CI	CI	M2	R2	-	-	M1	R1
Digital Literacy	-	-	M1	R1	CI	CI	M2	R2	-	-	M1	R1
Teamwork	-	-	M1	R1	CI	CI	M2	R2	-	-	M1	R1
Ethical Reasoning	-	-	-	-	M1	R1	CI	CI	M2	R2	-	-
Intercultural	-	-	-	-	M1	R1	CI	CI	M2	R2	-	-
Critical Thinking	-	-	-	-	M1	R1	CI	CI	M2	R2	-	-

The table below provides a suggestive plan for assessment, beginning AY2026:

The exact order of the core competencies is arbitrary, but the key is that 3 will be assessed at a time. The "measurement" semesters denote when the measurement will occur, but it will be measuring the previous academic year's work (F26 will focus on evidence from AY25-26, etc.). The 2nd measurement

and reporting will be largely the same as the first, but with an emphasis on reporting the results of any prior continuous improvements.

Conclusion

The Inquiry Core Curriculum is a reimagining of the Core Curriculum experience at CSU. Key features include the development of inquiry pathways, the inclusion of a 3-credit First Year Experience Course, and the addition of Signature Assignments built around nine Core Competencies. Students will complete 36-credit hours of coursework across a variety of disciplines. We look forward to collaborating with instructors and programs to create a distinctive core curriculum experience for all students at CSU.

Appendix A. Why Reform our General Education System?

The above presents the proposed changes to our general education system and gives some indication of the justification. But the justification runs much deeper and is grounded in social changes, demographic changes, new findings in the science of learning, and new evidence of what works in general education.

The aim of reform is to better promote student success through (1) promoting student belonging early in their CSU careers; (2) developing the foundational skills necessary for success at the university; and (3) beginning the development of broad transferable skills essential to success in any career or profession.

To further support the changes discussed above, below outlines some of the lines of evidence and justification considered by the committee(s), organized by the goals and features of the system.

1. Promoting integration

The new core aims to provide students with various mechanisms for *integrating* their learning across courses and drawing connections. This includes the optional Inquiry Pathways, the signature assignments in each course, and the inquiry-based structuring of courses. Why should we want a general education system that promotes integration in these ways?³

- The world is ever more complex and integrated. This includes the workplaces our students are likely to find themselves in. They will need to perform a variety of different tasks throughout the day, engaging with a variety of different perspectives and methods. Moreover, as recent work has suggested, we have moved from a "knowledge economy" to an "insight economy".⁴ No longer is it sufficient to have *knowledge* of content; what is vital is the ability to generate *insights*. Insight partly comes from being able to pull together disparate ideas and form connections.
- Our students' lives are ever busier, meaning they have less time outside of class to reflect on their learning and form connections themselves. To the extent forming connections is important at all, they need to be given more explicit opportunity to do so in their curriculum.
- Forming connections between disparate ideas supercharges learning.⁵ When students can integrate new knowledge with existing knowledge, or integrate knowledge across disciplines, their understanding is strengthened. Additionally, they develop the broad ability to integrate new knowledge, helping them become life-long learners.

³ Much of the discussion here is inspired by Paul Hanstedt (2018). Creating Wicked Students: Designing Courses for a Complex World. Routledge.

⁴ Eugene Chen Eoyang (2007). Two-way Mirrors: Cross-cultural Studies in Glocalization. Lexington Books.

⁵ Joshua R. Eyler (2018). *How Humans Learn: The Science and Stories Behind Effective College Teaching.* West Virginia University Press. See, also, Timo Mäantylä (1986). "Optimizing cue effectiveness: Recall of 500 and 600 incidentally learned words," *Journal of Experimental Psychology: Learning, Memory, and Cognition* 12 (1): 66-71.

• Global reality demands an ever greater ability to sort through mountains of information from all sorts of different fields.⁶ And this information is often overlapping. To understand a single social or political issue will likely require understanding natural scientific facts but also how those facts overlap with social or political considerations and the broader social and historical context of the issue.

2. Inviting & Accessible Course Design

Courses in the core curriculum are required to be designed in a way that makes them inviting and accessible to first-year, non-major students. This is both a reflection of OT-36 requirements and grounded in an understanding of the role of a core curriculum/general education program in a student's overall university career. In practice, this means that core courses should not be designed as a major course, or with the expectation that the students in the course have or will in the future take additional courses in the same program. Research on teaching and course design has suggested the following reasons for regarding core courses as distinct from major courses:⁷

- Student belonging and success. When non-majors enter a "general education" course that is designed predominantly for majors, they can easily feel out of their depth or like they do not belong in the course. This can result in poor performance, poor learning, and thus poor grades. Especially for students new to college, and especially first-generation college students, this sort of experience can result in a broader feeling that they do not belong in college at all. Clarifying the audience and catering courses appropriately can thus promote belonging and bring about both short-term and long-term success.
- Student interest and class culture. Designing core courses for their intended audience – first year, non-major students – can lead to course design decisions that better promote the interest of the relevant student population. This can generate a better class culture, as more students feel more invested given the course is designed for them. The result is a better learning community, better learning experience for students, and a better experience for the instructor as well.
- Improved learning. Educational theory emphasizes the idea of "desirable difficulties"⁸

 learning tasks that require a considerable amount of effort, but within the range of potential for the learner. When the audience of a course is more similar, it is easier to ensure that assigned tasks are desirable difficulties for all or most students. Thus, learning is enhanced. On the other hand, in a course designed for majors, any non-majors may be left behind.

⁶ Paul Gaston (2010). "Imperatives for and Drivers of Change," in *General Education and Liberal Learning: Principles of Effective Practice*. American Association of Colleges and Universities.

⁷ The ideas discussed here are inspired by Paul Handstedt (2012). *General Education Essentials: A Guide for College Faculty*. John Wiley & Sons.

3. Applied learning over content coverage

Sitting behind both integration and distinguishing the purpose of core courses is the idea that the core curriculum should be fundamentally about developing key competencies rather than learning a bunch of content. Of course, this does not mean content is not important. Rather, it simply suggests where the emphasis should lie. While a student majoring in your field will likely need to know a lot of specific content to succeed in later courses, graduate school, or specific industries, a student taking a core curricular course in your field has different needs. In particular, with the *inquiry-based* focus of the core curricular reform, we are suggesting they need to learn how to think in the ways your discipline privileges so they can use the tools of your discipline in their everyday lives. Doing this requires organizing a course less around covering specific content and more around ensuring students can work with whatever content they do learn. Why should that be the emphasis of a core curriculum?

- Transferability is key.⁸ The students taking a core course may never take another course in that same discipline. As a result, for the learning to matter to them at all, it will need to be capable of being transferred to other things they are doing. The best way to promote transferability is to practice transferring, and that comes from applying ideas to real-life or extra-disciplinary situations.
- Covering content does not mean students are learning content.⁹ Instead, knowledge must be "acted on" to be encoded in a way that constitutes long-term learning.¹⁰ Decreasing the breadth of content (where possible) to emphasize depth and application thus enhances student learning. While this is not always possible for major courses due to externally-imposed requirements, it is possible in the core curriculum.
- Promoting intrinsic motivation. Helping students see *why* learning what they are learning is important, and *how* it can help them with other things they care about can enhance their intrinsic motivation to participate in the course and learn the material.

As should be clear from these justifications, the updating and redesign of the core curriculum is fundamentally aimed at enhancing student success. This helps with student retention, improves classroom culture, produces more successful graduates, and all of that can lead to making CSU a more attractive proposition to students.

⁸ Hanstedt (2012).

⁹ Paul Gaston (2010). "Institutional Commitment," in *General Education and Liberal Learning: Principles of Effective Practice*. American Association of Colleges and Universities.

¹⁰ Jerry G. Gaff & James L. Ratcliff (1996). Handbook of the Undergraduate Curriculum: A Comprehensive Guide to Purposes, Structures, Practices, and Change. Jossey-Bass. See also J. Clark (2010). "Effective Pedagogy," in General Education and Liberal Learning: Principles of Effective Practice. American Association of Colleges and Universities; J. Zull (2002). The Art of Changing the Brain. Stylus.

Appendix B. Core Curriculum Framework Categories of Inquiry

Foundational Inquiries

Inquiry Launch is a First-Year Seminar course focused on introducing incoming students to the college experience. Courses will have a topical, inquiry focus designed by the faculty and meeting any of the OT-36 distribution categories. Additionally, all Inquiry Launch courses will be required to incorporate specific First-Year Experience components and develop the core competency of collaboration.

Finding Your Voice aims to introduce students to college writing conventions and help them develop their ability to express themselves through writing. ENG101: College Writing, which meets OT-36 "First Writing" learning outcomes, will satisfy this requirement and focus on developing written communication.

Research & Professional Writing is focused on continuing the writing development of *Finding your Voice* with a significant focus on research and/or professional writing. This requirement may be satisfied by ENG102: College Writing II or alternative courses created in other programs. In either case, the course must meet the OT-36 learning outcomes for "Second Writing" and emphasize the core competencies of written communication and information literacy.

Quantitative & Formal Reasoning emphasizes quantitative, statistical, and logical reasoning. Courses in this category must meet outcomes for one of the OT-36 mathematics, statistics, and logic courses and emphasize the core competency of collaboration.

African-American History & Culture emphasizes CSU's unique position in Cleveland, a majority minority city. Courses in this category must meet OT-36 learning outcomes for "Diversity, Equity, & Inclusion" as well as outcomes for either "Arts & Humanities" or "Social and Behavioral Sciences". Additionally, these courses will emphasize the core competency of intercultural knowledge and competence.

Methods of Inquiry

Human Culture & Creativity is designed to meet OT-36 arts & humanities learning outcomes and speak to the core competencies of written or oral communication and collaboration.

Global Human Perspectives is designed to meet OT-36 arts & humanities learning outcomes. Additionally, the primary topical focus must be on societies and/or cultures from Asia, Latin America, Africa, or the Middle East. Courses in this category must be designed to develop and assess the core competencies of intercultural knowledge & competence and written or oral communication.

Scientific Investigations courses will be designed to meet OT-36 learning outcomes for the natural sciences and include a minimum 1-credit hour laboratory component, which meets OT-36

requirements for lab components. Courses in this category must be designed to develop and assess the core competencies of quantitative reasoning and collaboration.

Nature & Technology courses will be designed to meet OT-36 learning outcomes for the natural sciences. They do not include a laboratory component. Courses in this category must be designed to develop and assess the core competencies of quantitative reasoning and information literacy.

Society & Human Behavior courses will be designed to meet OT-36 learning outcomes for the social and behavioral sciences. They must be designed to develop and assess the core competencies of collaboration and information literacy.

Diversity in Society courses aim to investigate aspects of social and cultural diversity in the United States or the world. Courses in this category must be designed to meet the OT-36 learning outcomes for "Diversity, Equity, & Inclusion. These courses should focus on the core competencies of intercultural knowledge and competence and written or oral communication.

Data & Digital Literacy courses provide students with two distinct options. Students may either complete a second quantitative & formal reasoning course, meeting OT-36 outcomes for a course in the "mathematics, statistics, and logic" OT-36 category, or complete a course satisfying OT-36 outcomes for "Social and Behavioral Sciences" and emphasizing the core competency of digital literacy. This may include, for instance, courses that emphasize the use of Microsoft Excel, Adobe Creative Cloud, or other digital technologies. The digital technology component of these courses must be significant.

Navigating the Inquiry Core Curriculum:

Potential Student Experiences

Inquiry	Student-	Professional	Transfer Route
Pathways	Centered Route	Route	
 Faculty-designed inquiry pathway through the curriculum focused on a common theme or issue Fosters connections between students and deep engagement in a specific issue Potential for development of core curriculum credentials or badges 	 Students design their own path through the core course offerings This route is created according to individual student needs & interests Accommodates students who change majors once they start the core curriculum 	 Allows students in certain major programs to complete core competencies in approved "replacement" major courses. Program curriculum designers will ensure all competencies in the CC are met 	 Supports students who transfer in credits that apply to their core curriculum Recognizes that some students will complete only part of the core curriculum at CSU Related to the Student-Centered Route in that the student designs the experience

Approved by Core Curriculum Committee on 12/11/2023

Appendix C. Methodological Outcomes: OT36

CSU's methodological outcomes reflect OT-36-approved areas of distribution for general education curriculum and includes English composition, mathematics, statistics, and logic, arts and humanities, social and behavioral sciences, and natural sciences.

General Requirements

All courses approved for a "Methodological Inquiry" category must:

- Be offered at the 100- or 200-level;
- Be inviting and accessible to non-majors; and
- Engage students in inquiry using the techniques and methods of the discipline, rather than focus exclusively on content coverage

Courses must additionally incorporate all the learning outcomes associated with the relevant category as listed below.

Arts & Humanities

Courses designated as fulfilling the OT36 Arts & Humanities requirements must provide opportunities for learners to achieve all the following learning outcomes:

- 1. Students will be able to employ principles, terminology, and methods from disciplines in the arts and humanities.
- 2. Students will be able to analyze, interpret, and/or evaluate primary works that are products of the human imagination and critical thought.
- 3. Students will be able to reflect on the creative process of products of the human imagination and critical thought.
- 4. Students will be able to explain relationships among cultural and/or historical contexts.
- 5. Students will be able to convey concepts and evidence related to humanistic endeavors clearly and effectively.

Social or Behavioral Sciences

Courses designated as social or behavioral sciences will provide opportunities for learners to achieve all the following learning outcomes:

- 1. Students will be able to explain the primary terminology, concepts, and findings of the specific social and behavioral science discipline.
- 2. Students will be able to explain the primary theoretical approaches used in the specific social and behavioral science discipline.

- 3. Students will be able to explain the primary quantitative and qualitative research methods used in the specific social and behavioral science discipline.
- 4. Students will be able to explain the primary ethical issues raised by the practice and findings of the specific social and behavioral science discipline.
- 5. Students will be able to explain the range of relevant information sources in the specific social and behavioral science discipline.

Natural Sciences

Courses designated as natural sciences will provide opportunities for learners to achieve all the following learning outcomes:

- 1. Students will be able to explain basic terminology, concepts, and methods of modern science.
- 2. Students will be able to outline how scientific principles are formulated, tested, and either modified or validated.
- 3. Students will be able to describe or predict natural phenomena using current scientific models and theories.
- 4. Students will be able to apply scientific methods of inquiry appropriate to a discipline to gather and analyze data and draw evidence-based conclusions.
- 5. Students will be able to describe how scientific data are reproducible while also having intrinsic variation and possible limitations.
- 6. Students will be able to solve problems or address issues using foundational knowledge and discipline-specific concepts.
- 7. Students will be able to communicate how scientific findings contribute to the modern world.
- 8. Students will be able to evaluate evidence-based scientific arguments in a logical fashion and distinguish between scientific and non-scientific evidence and explanations.

Natural Science Laboratory Requirement

Each student must complete at least one natural science course that includes a laboratory component. This component must carry at least one credit hour and involve at least 1,500 minutes of laboratory activities (an average of no less than two hours per week for a traditional 15-week semester). During the course, students will demonstrate the application of the methods and tools of scientific inquiry appropriate to the discipline, by actively and directly collecting, analyzing, and interpreting data, presenting findings, and using information to answer questions.

A natural science course with a laboratory component must meet outcomes 1-8 above and achieve all the following objectives for laboratory activities:

- Involve realistic measurements of physical quantities;
- Involve data analysis, using data that are unique and/or physically authentic and that include random and/or systematic (natural) variability;
- Include realistic interactions with experimental apparatus, and realistic manipulation of tools/instruments and/or observed objects in space and time;

- Involve synchronous feedback on safety (and consequences of unsafe actions), correctness of procedure, and progress toward experimental goals; and
- Involve effective interaction with the instructor at several points during each lab activity

Diversity, Equity, and Inclusion (DEI)

Courses designated as Diversity, Equity, and Inclusion (DEI) will provide opportunities for learners to achieve all the following learning outcomes:

- 1. Students will be able to describe identity as multifaceted and constituting multiple categories of difference such as race, color, language, religion, national origin, gender, sexual orientation, age, socio-economic status, and intersectionality as operating by individual and group.
- 2. Students will be able to describe how cultures (including their own) are shaped by the intersections of a variety of factors such as race, gender, sexuality, class, disability, ethnicity, nationality, and/or other socially constructed categories of difference.
- 3. Students will be able to recognize the complex elements of cultural biases on a global scale by identifying historic, economic, political, and/or social factors, such as ethnocentrism, colonialism, slavery, democracy, and imperialism.
- 4. Students will be able to recognize how sociocultural status and access to (or distribution of) resources are informed by cultural practices within historical, social, cultural, and economic systems.

Additionally, courses must meet <u>at least one</u> of the following outcomes:

- 5. Students will be able to articulate the meaning of empathy and its role in strengthening civic responsibilities and reducing the negative impact of societal stereotypes.
- 6. Demonstrate empathy by successfully interpreting intercultural experiences from one's own and others' worldview.

Appendix D. Core Competencies

CSU's Core Competencies reflect a university commitment to ensuring all graduates have the essential skills and abilities foundational to a productive and successful life.

Written Communication

Consistent with AAC&U's VALUE rubrics, Cleveland State University defines written communication as "the development and expression of ideas in writing." Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Consistent with the Ohio Department of Higher Education (ODHE) requirements, courses designated as developing written communication abilities will provide opportunities for learners to develop written communication abilities through the following course-embedded learning experiences.

- Learners will develop their understanding of the rhetorical situation as they read and write in several genres.
- Learners will develop their critical thinking skills as they analyze model texts and secondary sources.
- Learners will study all phases of the writing process, thus becoming better revisers and editors of their own work and learning to help peers improve their texts.
- Learners will study genre conventions and apply appropriate conventions to their own work.
- Learners will compose a substantial amount and variety of work in order to demonstrate that they have met the first four outcomes.

Consistent with the ODHE requirements, courses designated as written communication should include the following:

- Written assignments spanning a variety of texts, including at least one researched essay;
- Frequent "low-stakes" assignments, such as journals, reading responses, and in-class efforts;
- A minimum of 5,000 total words of formal, edited text;
- Opportunities for students to revise written work; and
- Frequent, individual feedback from instructors and, as appropriate, peers.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching written communication will provide opportunities for learners to achieve the following six learning outcomes:

- 1. *Context and purpose.* Students will be able to demonstrate an understanding of the context and purpose for writing such that the text has the writer's intended effect on an audience.
- 2. *Content development.* Students will be able to use appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.
- 3. *Genre and disciplinary conventions.* Students will be able to use formal and informal rules for particular kinds of texts and/or media that guide formatting, organization, and stylistic choices appropriate for a specific academic field.
- 4. *Sources and evidence*. Students will be able to use and source texts (written, oral, behavioral, visual, or other) to extend, argue with, develop, define, or shape the writer's ideas.
- 5. *Control of syntax and mechanics*. Students will be able to use syntax and mechanics effectively to communicate ideas.

Oral Communication

Consistent with AAC&U's VALUE rubrics, CSU defines oral communication as "a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors."

Consistent with the ODHE requirements, students will be provided opportunities to:

- Present speeches that are consistent and appropriate for the purpose, context, and audience.
- Present speeches using effective verbal and nonverbal delivery techniques and appropriate presentational aids.
- Critically and constructively evaluate their own and others' speeches.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching oral communication will provide opportunities for learners to achieve the following five learning outcomes.

- 1. *Organization*. Students will be able to group and sequence ideas and supporting material such that the organization reflects the purpose of the presentation, is cohesive, and accomplishes the goal(s).
- 2. *Language*. Students will be able to use unbiased vocabulary, terminology, and sentence structure appropriate to the topic and audience.
- 3. *Delivery*. Students will be able to use posture, gestures, eye contact, and voice to enhance the effectiveness of a presentation and to make the speaker appear polished/confident.
- 4. *Supporting material.* Students will be able to provide credible, relevant, and convincing information (e.g., explanations, analogies, quotations, statistics, examples, contexts) that supports the principal ideas of the presentation or establishes the presenter's credibility on the topic.
- 5. *Central message*. Students will be able to articulate a precise, compelling, and memorable purpose or main point of a presentation.

Quantitative Reasoning

Consistent with AAC&U's VALUE rubrics, CSU defines quantitative reasoning as "a habit of mind, competency, and comfort in working with numerical data."

Individuals with strong quantitative reasoning skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats (using words, tables, graphics, mathematical equations, etc., as appropriate).

Courses, programs, or learning experiences designated as teaching quantitative reasoning will provide opportunities for learners to develop quantitative reasoning skills through the following course-embedded learning experiences.

- Learners will evaluate arguments in a logical fashion and develop competence in analysis and logical argument.
- Learners will develop and use the concepts of numeracy to investigate and explain quantitative relationships and solve problems in a variety of contexts.
- Learners will make decisions by analyzing mathematical models, including situations in which the student must recognize and/or make assumptions.
- Learners will use the language and structure appropriate to the subject matter to investigate, represent, make decisions, and draw conclusions.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching quantitative reasoning will provide opportunities for learners to achieve the following six learning outcomes.

- 1. *Interpretation*. Students will be able to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- 2. *Representation*. Students will be able to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- 3. *Calculation*. Students will be able to calculate relevant information using various mathematical formulas.
- 4. *Application/Analysis.* Students will be able to make judgments and draw appropriate conclusions based on the quantitative analysis of data while recognizing the limits of this analysis.
- 5. *Assumptions*. Students will be able to make and evaluate important assumptions in estimation, modeling, and data analysis.

Information Literacy

Consistent with AAC&U's VALUE rubrics and the ACRL's Framework for Information Literacy in Higher Education, CSU defines information literacy as the set of integrated abilities and mindsets enabling students to answer questions and solve problems by identifying information needs, discovering information strategically, understanding how information is created and valued, evaluating information critically, participating in conversations as knowledge creators, and using information ethically.

Courses, programs, or learning experiences designated as teaching information literacy will provide opportunities for learners to achieve the following five learning outcomes.

- 1. Effectively defines the scope of the research question, determining key concepts and perspectives.
- 2. Selects and utilizes appropriate tools to search for different types of information with a spirit of inquiry and discovery.
- 3. Strategically searches for information and assesses results, considering the multiple criteria relevant to evaluating the information in context.
- 4. Organizes, synthesizes, and articulates information from sources to generate new knowledge and/or achieve a specific purpose with clarity and depth.
- 5. Uses information ethically, providing complete and accurate citations. Paraphrases, summarizes, and quotes sources with fidelity to the original context. Distinguishes between common knowledge and ideas requiring attribution. Demonstrates understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

Digital Literacy

CSU defines digital literacy as a habit of mind, competency, and comfort in working with digital technologies.

Individuals who are digitally literate are able to identify which (if any) digital tools are appropriate to a task, proficiently use the appropriate tools for the task, effectively communicate with digital tools, and engage with digital tools safely and ethically.

Learning Outcomes

Courses, programs, and learning experiences designated as teaching digital literacy will provide opportunities for learners to achieve the following six learning outcomes.

1. *Information gathering*. Students will engage with appropriate digital tools and platforms to gather needed information.

- 2. *Communication and collaboration*. Students will use digital tools to effectively communicate and collaborate with others.
- 3. *Presentation of work*. Students will be able to use appropriate digital tools to convey information and present work, respecting both disciplinary conventions and conventions of the digital medium.
- 4. *Safe and ethical use.* Students will be able to demonstrate an understanding of safe online practices and ethical and legal use of digital information and technologies.
- 5. Self-directed learning. Students will demonstrate use of strategies to seek out resources, problem solving, and trouble shoot when learning new digital technologies
- 6. Organization. Students will practice using digital tools to bolster good academic and professional habits, and manage their data on personal devices and online.

Collaboration & Teamwork

Consistent with AAC&U's VALUE rubrics, CSU defines collaboration and teamwork as "the behaviors under the control of individual team members (i.e., effort they put into team tasks, their manner of interacting with others on the team, and the quantity and quality of contributions they make to team discussions.)"

Accordingly, courses, programs, or experiences designated as teaching teamwork should include:

- Learners should be required to complete at least one significant project or multiple assignments spanning multiple weeks that involves collaboration in a team.
- Teams should be comprised of a minimum of three (3) members.
- Projects/assignments should be sufficient duration for team dynamics to be experiences.
- Each student's performance as a team member must be assessed using the CSU modified version of the AAC&U Teamwork VALUE rubric.

Approved by Core Curriculum Committee on 12/11/2023

- At least 15% of the course grade should depend on some combination of (a) the student's evaluated performance as a team member and/or (b) the learner's evaluated learning about principles of successful teamwork.
- A portion of course instruction should be dedicated to (a) effectively managing a team project/assignment (e.g., establishing roles, responsibilities, milestones, and timelines) and (b) developing interpersonal communication skills and cultural awareness to create a collaborative and inclusive team environment.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching collaboration & teamwork will provide opportunities for learners to achieve the following five learning outcomes.

- 1. *Contributes to team meetings.* Students will be able to contribute ideas, solutions, and courses of action during team meetings.
- 2. Engagement with team members. Students will be able to engage other team members, constructively and respectfully.
- 3. *Individual contributions*. Students will be able to provide meaningful contributions to the team that advances the work of the group.
- 4. *Constructive team climate*. Students will be able to foster a constructive team climate.
- 5. *Conflict management*. Students will be able to manage team conflict.

Ethical Reasoning

Consistent with AAC&U's VALUE rubrics, CSU defines ethical reasoning as "reasoning about right and wrong human conduct." This core competency will be assessed in major programs.

Ethical reasoning requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical questions, and consider the ramifications of alternative actions. Students' ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching ethical reasoning will provide opportunities for learners to achieve the following five learning outcomes.

- 1. *Ethical self-awareness*. Students will be able to recognize one's own ethical core beliefs and how they shape ethical conduct and thinking.
- 2. *Perspectives/concepts.* Students will be able to understand ethical perspectives, theories, and/or concepts.

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- 3. *Ethical issue(s)*. Students will be able to recognize, evaluate, and connect ethical issues.
- 4. *Application*. Students will be able to apply ethical perspectives, theories, or concepts to a decision-making situation.
- 5. *Evaluation.* Students will be able to evaluate alternative ethical perspectives within a decision-making situation.

Intercultural Knowledge and Competence

Consistent with AAC&U's VALUE rubrics, CSU defines intercultural knowledge and competence as "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts."

Consistent with ODHE requirements, students will be provided opportunities to:

- 1. Examine identity as multifaceted and constituting multiple categories of difference such as race, color, language, religion, national origin, gender, sexual orientation, age, socio-economic status, and intersectionality.
- 2. Investigate how cultures (including their own) are shaped by the intersection of a variety of factors such as race, gender, sexuality, class, disability, ethnicity, nationality, and/or other socially constructed categories of difference.
- 3. Recognize the complex elements of cultural biases on a global scale by identifying historic, economic, political, and/or social factors, such as ethnocentrism, colonialism, slavery, democracy, and imperialism.
- 4. Recognize how sociocultural status and access to (or distribution of) resources are informed by cultural practices within historical, social, cultural, and economic systems.

And at least one of the following:

- 5. Articulate the meaning of empathy and its role in strengthening civic responsibilities and reducing the negative impact of societal stereotypes.
- 6. Demonstrate empathy by successfully interpreting intercultural experiences from one's own and others' worldview.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching intercultural knowledge and competence will provide opportunities for learners to achieve the following six learning outcomes.

1. *Cultural self-awareness*. Students will be able to articulate insights about one's own cultural rules and biases.

- 2. *Cultural worldwide frameworks.* Students will be able to demonstrate an understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
- 3. *Empathy*. Students will be able to interpret intercultural experience from their own and others' worldview and to act in a supportive manner that recognizes the feelings of another cultural group.
- 4. *Verbal and non-verbal communications.* Students will be able to demonstrate an understanding of cultural differences in verbal and non-verbal communication and to negotiate a shared understanding based on those differences.
- 5. *Curiosity*. Students will be able to ask complex questions of other cultures and to articulate answers to these questions that reflect multiple cultural perspectives.
- 6. *Openness*. Students will be able to initiate and develop interactions with culturally different others while suspending judgment in valuing their interactions with culturally different others.

Critical Thinking

Consistent with AAC&U's VALUE rubrics, CSU defines critical thinking as "a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion."

Consistent with the National Council for Excellence in Critical Thinking, courses programs, or other learning experiences designated as teaching critical thinking will provide opportunities for students to develop critical thinking skills through the process of actively conceptualizing, applying, analyzing, synthesizing, and evaluating information. Information can be gathered from external sources, observation, experience, reflection, reasoning, or communication.

Learning Outcomes

Courses, programs, or learning experiences designated as teaching critical thinking will provide opportunities for learners to achieve all of the following five learning outcomes.

- 1. *Explanation of issues*. Students will be able to critically state, describe, and consider an issue or problem.
- 2. *Evidence*. Students will be able to use information from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis.
- 3. *Influence of context and assumptions*. Students will be able to systematically and methodically analyze assumptions and carefully evaluate the relevance of contexts when presenting a position.

- 4. *Student's position (perspective, thesis/ hypothesis).* Students will be able to state a specific position (i.e., perspective, thesis, or hypothesis) that is thoughtful, recognizes complexities, and acknowledges limitations.
- 5. *Conclusions and related outcomes.* Students will be able to state conclusions and related outcomes (consequences and implications) logically and in a priority order.

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Appendix E. Designing for Inquiry

Inquiry & Skills Focus

Part of the aim of this update is to make core curricular courses more interesting to students, and to help them see the value of what they are learning. To do that, all courses in the core curriculum should take an *inquiry orientation* to course design and instruction. The inquiry orientation is inspired by, not but identical to, inquiry-based learning (IBL), a well-researched high impact approach to education that is used through primary, secondary, and tertiary education. The inquiry orientation of the core curriculum means that courses should be designed around helping students investigate important questions or problems using the content and methods of the discipline, rather than focusing solely on covering content.

Additionally, to ensure students receive ample opportunity to develop their inquiring minds, courses cannot be primarily focused on content coverage.

In practice, this will mean two things: Identifying a 'course narrative' that frames why students are learning what they are in terms of some sort of inquiry; and reducing the content of a 'survey' or major 'introductory' course by about 25% to provide room for the inquiry. Exactly how much (if at all) any given course will need to change along either of these dimensions will vary with the current nature of the course. Many courses are already framed around some sort of inquiry (even if it's implicit) and many already make plenty of room for skill development.

Courses in the CSU Core Curriculum should take an *inquiry orientation* to their design. This inquiry orientation is inspired by, but not identical to, *Inquiry-Based Learning* (IBL). More precisely, in line with IBL, the inquiry orientation emphasizes the active involvement of students in exploring and investigating real-world problems and questions.

The inquiry orientation is broadly aimed at promoting student success through sparking student curiosity, engaging them actively in the learning process, and helping them develop higher-order thinking skills. IBL has been shown, at the K-12 and university levels, to provide these and other benefits.

To assist faculty in adopting an inquiry orientation in their core courses, this document outlines the relevant aspects of Inquiry-Based Learning, provides an 'action plan' for designing an inquiry-oriented course, and provides a few examples of course design using the action plan.

Aspects of the Inquiry Orientation

At the highest level, Inquiry-based Learning is a form of constructivist learning that aims to spark student curiosity and help them develop higher-order thinking skills and mental architecture needed to be a critical, autonomous thinker. We can see this highest level of IBL in action when we engage students in independent research, for instance in their program capstone. Additionally, we can understand the orientation of IBL by recognizing that it asks faculty to see their students as apprentices and to organize their courses and learning experiences so as to lead the students through the same sort of processes you may take as an expert in the field.

Core courses are not expected to reach this highest level of inquiry, but instead to start students on that pathway through various forms of **structured inquiry**. This is in line with IBL research that emphasizes the importance of scaffolding inquiry development. To understand the idea of structured inquiry, it is helpful to identify the various steps common to an inquiry process:

- 1. Identification of a topic of interest
- 2. Formulation of research question(s)
- 3. Gathering of resources aimed at investigating and answering the question(s)
- 4. Analyzing and evaluating the resources
- 5. Synthesizing information gained to answer, or better understand, the initial question(s)

While the highest level of inquiry, often called **open inquiry**, would have students engage in all five steps in a largely self-directed manner, structured inquiry involves the instructor in completing, or at least providing significant guidance, in completing some of the steps.

A typical method of scaffolding structured inquiry involves beginning with structure for all five steps, and then removing or reducing the structure for the later steps while maintaining it for the earlier steps. For instance, we may identify an interesting question in our field (steps 1 and 2) that we will help students explore, provide them relevant readings or other materials (step 3), and then provide structured activities that help them complete steps (4) and/or (5). In this form of structured inquiry, students are beginning the process of critical thinking through the active engagement in steps (4) and (5).

Inquiry could then be further scaffolded by, for instance, providing activities that guide students through the gathering of resources for a pre-provided question, followed by additional practice with steps (4) and (5), perhaps with less structure or guidance than previously provided.

To repeat, while we should aim for students to have the ability to engage in open inquiry by the end of their university career, the inquiry orientation of the core curriculum is more modestly aimed at developing their inquiry skills through engaging in structured and semi-structured activities related to steps (4) and (5), and perhaps (3).

Designing for Inquiry

Through the Center for Faculty Excellence, resources and workshops will be made available to assist faculty in designing inquiry-oriented courses. Briefly, this consists of the following sorts of steps:

- 1. Identifying the overarching goal(s) of the course, by answering the question: what should students be able to *do* by the end of the course. This puts the emphasis on student activity with information, rather than on the presentation on information.
- 2. Identifying the ancillary skills students will need to be able to achieve the goal(s) of the course. This puts emphasis on the skills that will need to be developed in the course.
- 3. Choosing the content and topics of the course in the context of the overarching goal(s) and ancillary skills.
- 4. Identification of the steps of inquiry that will be structured and which will be open to students, keeping in mind that these may be scaffolded throughout the course

5. Construction of developmental activities and assessments that align with the overarching goal(s) and ancillary skills, and fit with the content and topics chosen

High Impact Practices

Educational research has identified several practices that provide significant educational benefits to the students who participate in them. Additionally, research into High Impact Practices (HIPs) has identified more general features of educational experiences that make the experience high impact.

All core curriculum instructors are encouraged to incorporate high impact practices into their courses, either by making use of the set of identified practices listed below or by designing learning experiences that are in line with the features of high impact practices.

Identified High Impact Practices

The list below is derived from the American Association of Colleges & Universities' list of High Impact Practices. Those HIPs which apply more at an institutional level (such as common intellectual experiences) have been omitted.¹¹

- Collaborative Assignments and Projects
- ePortfolios
- Writing Intensive
- Undergraduate Research
- Service Learning or Community-based Learning

The Features of High Impact Practices

Research on identified HIPs indicated that they all shared eight key features, which can be used as the basis for designing new high impact practices.¹²

- 1. Performance expectations set at appropriately high levels
- 2. Significant investment of time and effort by students over an extended period of time
- 3. Interactions with faculty and peers about substantive matters
- 4. Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar
- 5. Frequent, timely, and constructive feedback
- 6. Periodic, structured opportunities to reflect and integrate learning
- 7. Opportunities to discover relevance of learning through real-world applications
- 8. Public demonstration of competence

¹¹ https://www.aacu.org/trending-topics/high-impact

¹² George D. Kuh & K. O'Donnell (2013). Ensuring quality & taking high-impact practices to scale. Washington, DC: Association of American Colleges & Universities.

Appendix F: Review Process and Core Curriculum Committees

The Core Curricular Review Process

The review and updating of CSU's general education system was initiated by Faculty Senate in Fall 2022. A committee composed of 11 faculty and 4 *ex officio* members worked throughout the Spring 2023 semester to review the current system, faculty input, national trends, and other data to produce a set of high-level guiding principles for reform. These principles were accompanied by a variety of potential updates the committee reviewed and considered.

A subset of the committee, composed of seven faculty and four *ex officio* members, continued the work throughout the summer. This committee participated in a week-long intensive institute on general education reform hosted by the American Association of Colleges & Universities. The committee then leveraged the lessons of that institute, and the action plan they created as part of it, to develop the Inquiry Core Curriculum. Throughout that process, they presented ideas and gained feedback from various stakeholders, including faculty, advisors, students, and employers. The result of the summer work is a robust updating and rebranding of general education at CSU.

An ad-hoc committee of 10 faculty and 6 *ex officio* members (now including the directors of core curriculum and assessment in the Office of Instructional Excellence) worked through the Fall 2023 semester to bring this revised proposal for the core curriculum to Faculty Senate.

Ad-Hoc Committee on the Core	Summer Sub-Committee	Fall 2023 Ad-Hoc
Curriculum		Committee on the Core
		Curriculum
Marcus Schultz-Bergin, Arts &	Marcus Schultz-Bergin	Emilie Zickel, Arts &
Sciences (Arts)	Sandra Chincholkar	Sciences (Humanities)
Sandra Chincholkar, Arts & Sciences	Toni Paoletta	Anne O'Connor, Arts &
(Sciences)	Joanne Belovich	Sciences (Sciences)
Toni Paoletta, Business	Jeffrey Bolt	Toni Paoletta, Business
Karla Hamlen Mansour, Public	Dorothy Hamilton	Karla Hamlen Mansour,
Affairs & Education	Tatiana Gracyk	Public Affairs & Education
Joanne Belovich, Engineering	Ben Richards	Joanne Belovich, Engineering
Patricia Stoddard Dare, Health	Kristy Tokarczyk	Carol Olszewski, Health
Abby Moncrieff, Law	Kevin Neal	Jeffrey Bolt, at large
Jeffrey Bolt, at large	Debbie Jackson	Adebimpe Adedipe, at large
Dorothy Hamilton, at large	_	Shelley Rose, at large
Shelley Rose, at large		Tatiana Gracyk, University
Tatiana Gracyk, University		Curriculum Committee
Curriculum Committee		Ben Richards, Libraries (ex
Ben Richards, Libraries (ex officio)		officio)
Kristy Tokarczyk, Advising (ex		Kristy Tokarczyk, Advising
officio)		(ex officio)

Kevin Neal, Registrar (ex officio)	Kevin Neal, Registrar (ex
Debbie Jackson, Vice Provost (ex	officio)
officio)	Debbie Jackson, Vice Provost
	(ex officio)
	Marcus Schultz-Bergin,
	Director of Core Curriculum
	(ex officio)
	Laura Northrop, Director of
	Assessment (ex officio)

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