Reimagining the Core Curriculum Recommendation Report

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Introduction

The Reimagining the Core Curriculum working group (RCwg) began our work in November 2023, in response to our charge from Provost Constancio Nakuma. The charge asked the working group to "critically reflect on, research national models for, and propose a CU Denverinformed model for what makes sense to include in our 'general education'/ 'core curriculum' portfolio for students who declare different academic majors." Provost Nakuma identified three key questions related to this charge:

- 1. What must the structure and content of the core curriculum be for students in different academic majors to provide for their "broad education" yet find the components of the core to be germane to and complementary of their academic major focus and interests?
- 2. How should the core be configured to eliminate barriers to students' academic progression, especially when they need to switch majors?
- 3. How should documented prior learning and experiential learning factor into the general education core requirements?

In starting this process, we were asked to review the CU Denver student personas, which were developed through the University's student enrollment management (SEM) process and informed by our location and context. The charge noted that CU Denver is "the only urban public research university in Denver that is also aspiring to be the nation's first equity-serving institution" and that it "serves a predominantly working learner commuter population of students seeking social mobility." Revisions to the core should, therefore, foreground the university's "equity-serving aspiration."

After research into a range of state and national models, surveys of students and faculty, meetings with transfer advisors and coordinators, reviews of gtPathway, CDHE, and HLC requirements, and a focused study of the SEM student personas; the RCwg reimagined and developed a core that is transfer-friendly, outcome-based, and thematically structured.

The CU Denver Core Reimagined

Our recommended new core is based on a new set of objectives, outcomes, and skills (outlined in the next section), which emphasize the ethics and abilities necessary to address and solve emerging complex social problems. Ongoing feedback from students, staff, faculty, and administrators has stressed the importance of interdisciplinary approaches to current issues, such as sustainability AI, local and regional histories and cultures, diversity, and social justice. Our recommended structure includes these suggestions in a flexible model for students with diverse academic needs and backgrounds and encourages them to group (and make sense of)

their core requirements according to themes, topics, and/or certificates. Our recommended structure is as follows:

Required Core Courses (gtPathways-aligned and transfer-friendly)

- 6 credits of multimodal communication
- 3 credits of quantitative reasoning
- 15 credits of Arts and Humanities, Behavioral and Social Sciences, History, Cultural
 Diversity (can include gtPathways Arts and Humanities, History, and Social Sciences &
 Behavioral Sciences courses), and International (Global) Perspectives (can include
 gtPathways Arts and Humanities, History, and Social Sciences & Behavioral Sciences
 courses)
 - Arts and Humanities 6 credits
 - History 3 credits
 - Social and Behavioral Sciences 3 credits
 - One of the above categories 3 credits
- 7 credits of Natural and Physical Sciences (including a 1 credit applied lab)

Total = 31 credits

Integrated Learning

A key feature of the proposed core curriculum is a more coherent learning framework informed by a wide range of disciplines and fields, a framework that supports integrated learning experiences for all undergraduate students. By organizing the core curriculum into thematic clusters, students will have access to choice and flexibility within a coherent structure—important features of a new core curriculum according to students (see Survey Questions and Results, below). We propose integrated learning experiences that connect different disciplines around common themes, featuring the following key aspects:

- 1. **Interdisciplinary Approach**: Core courses from various fields should support students to explore a central theme and develop their knowledge of connections across disciplines.
- 2. Thematic Structure: Topical or conceptual themes should be broad and specific, encouraging students to explore an overall idea across multiple courses, while developing their knowledge in particular core and gtPathways knowledge areas and competencies. Theme possibilities include sustainability, social justice, technology and society, global cultures, and health and wellness. However, given that there are any number of ways to develop themes to guide the Core curriculum, this may offer a rich opportunity for student and faculty input and innovation.
- 3. **Embedded Skills Development**: Throughout each core course, students should develop intellectual skills that include critical thinking, communication, and problem-solving. Development of these skills can be supported through collaborative learning opportunities (e.g., projects), experiential learning, and similar activities. Foundational academic skills also may be developed in an introductory course or first year seminar.

- 4. **Student Success**: We recommend that all first year, first time students participate in a thematic cluster, supported by undergraduate advising. Requiring student participation in a thematic cluster may follow the development and piloting of the model; we perceive that thematic clusters should principally support student success, and its design should not obstruct student progress.
- 5. **Flexibility**: Students should be able to choose a conceptual or topical theme that aligns with their personal interests and/or career goals, supporting a more personalized educational experience. Students should also have the opportunity to propose a unique thematic cluster.

Thematic Clusters

We propose offering a CU Denver Core Curriculum characterized by integrated learning experiences in the form of thematic clusters that enhance the educational experience and satisfy the Core objectives, outcomes, and durable skills (outlined later in this report and proposed Core); we anticipate that this structure make learning more relevant and engaging. Thematic clusters also can prepare students for the complexities of the modern world. Each cluster includes courses representing multiple Core competencies and knowledge areas and reflect the aforementioned key aspects of integrated learning. Each cluster might also incorporate an initial course(s) that introduces students to the theme guiding the thematic cluster while also supporting their development of fundamental academic skills (in similar fashion to our current first year seminar courses).

Thematic Cluster considerations:

- Transferability: Students who transfer in to CU Denver may experience thematic clusters via certificates or/and capstones. Students who transfer from CU Denver to public institutions in Colorado will
- Student access: While our recommendation is that the Core is organized thematically, its design should ensure that students have a wide range of course options at various dates and times and in various modalities (e.g., face-to-face, hybrid, online).
- Design: To the best and most reasonable extent, the Core curriculum should continue to include many courses across a wide range of gtPathways-aligned knowledge areas and competencies. Each thematic cluster should, in total, offer opportunities for students to develop each of the Core durable skills and learning outcomes, supporting and guiding their ultimate cultivation of the Core objectives (see below, beginning on page 6).
- Learning: It was outside of the process of this working group to engage in more systematic study of whether the Core obstructed student success. A learning approach will support understanding how thematic clusters contribute to or hinder student success.

Below are examples of thematic clusters that may be offered in a new Core Curriculum— employing the current knowledge areas (including History, which is a gtPathways knowledge area), suggesting revised competencies (Quantitative Reasoning; Communications) and

imagining the types of courses that might be offered as part of a thematic cluster. *Note: each cluster title is accompanied by initials indicating the current knowledge areas that might be involved.*

Cluster a. Sustainability (Natural and Physical Sciences (NPS); Behavioral Science (BS); Social Science (BS); Communication (Comm); Quantitative Reasoning (QR); History (H); Cultural Diversity (CD))

- 1. <u>Innovative Pathways to a Sustainable Future</u>: A course introducing first year students to the topic of sustainability, also supporting their development of academic success skills.
- 2. <u>Environmental Science 101: Introduction to Environmental Science</u>: Focuses on ecosystems, biodiversity, and sustainability practices.
- 3. <u>Sustainable Urban Development</u>: Examines sustainable practices in urban planning and development.
- 4. <u>Renewable Energy Systems</u>: Covers the principles and technologies behind renewable energy sources like solar, wind, and hydro power.

Cluster b. A Just Society (ex. SS/BS; Comm; CD; International Perspectives (IP); Arts & Humanities (A/H); H)

- Empowering Communities: Strategies for Social Justice and Equity: A course introducing first year students to the topic of social justice and equity, also supporting their development of academic success skills.
- 2. <u>Introduction to Social Justice</u>: Explores the concepts of equity, justice, and human rights.
- 3. Race, Class, and Gender: Analyzes the intersections of race, class, and gender in society.
- 4. <u>Community Engagement and Advocacy</u>: Practical course involving community serviceand advocacy-focused learning.

Cluster c. Technology and Society (ex. QR; A/H; H; Comm; BS/SS; IP; CD)

- 1. <u>Tech and Societies: Navigating the Digital Age</u>: A course introducing first year students to the topic of the role of technology in broader societal contexts, also supporting their development of academic success skills.
- 2. Digital Literacy: Teaches essential digital skills and the impact of technology on society.
- 3. <u>Ethics in Technology</u>: Discusses ethical issues related to technology, including privacy, security, and Al.
- 4. <u>History of Technology</u>: Examines the development of technology and its influence on human history.

Cluster d. Global Cultures (ex. CD; IP; Comm; BS; SS; A/H; H)

- 1. <u>Exploring Global Cultures: Diversity, Difference, and Interconnectedness</u>: A course introducing first year students to global communities and contexts, also supporting their development of academic success skills.
- 2. World History: Provides a broad overview of global historical events and movements.
- 3. <u>Cultural Anthropology</u>: Studies diverse cultures and their social structures.

4. <u>Global Health Issues</u>: Focuses on health challenges and solutions in different parts of the world.

Cluster e. Public Health, Personal Wellness (ex. IP; BS; SS; NPS; A/H; H; CD)

- 1. <u>Holistic Health: Integrating Public Health and Mental Well-being</u>: A course introducing first year students to global communities and contexts, also supporting their development of academic success skills.
- 2. <u>Introduction to Public Health</u>: Covers the basics of public health principles and practices.
- 3. <u>Nutrition and Wellness</u>: Examines the role of nutrition in maintaining health and wellness.
- 4. <u>Mental Health Awareness and Advocacy</u>: Addresses mental health issues and promotes strategies for mental well-being.

Cluster f. Living in Colorado (ex. NPS; SS; BS; H; A/H; CD)

- 1. <u>Discovering Colorado: Geographies and Communities</u>: A course introducing first year students to Colorado as an array of place-types ranging from urban to rural, also supporting their development of academic success skills.
- 2. <u>Urban Studies</u>: Examines the development, structure, and functioning of urban areas in Colorado, with a focus on Denver.
- 3. <u>Rural Sociology</u>: Studies the social structures, challenges, and opportunities in rural Colorado communities.
- 4. <u>Suburban Development</u>: Explores the growth and characteristics of suburban areas, including housing, transportation, and community life.
- 5. <u>Exurban Dynamics</u>: Investigates the unique aspects of exurban areas, where urban and rural characteristics intersect.

As noted above, thematic clusters offer a curricular design that provides students with a comprehensive understanding of a particular theme, integrating knowledge from various disciplines to enhance their learning. While we propose the use of thematic clusters to support student engagement and success, we recognize that students may decide to pursue (i.e., propose) a thematic cluster not already represented but made up of current core courses. This reimagined Core Curriculum can support this demonstration of student agency.

Thematic Clusters: Other Possibilities

For students who begin their higher education journeys at CU Denver, and for those students who transfer from other institutions, thematic clusters offer a unique CU Denver learning experience that is supportive of all students. Two such possibilities include certificates and upper-division capstone courses.

Certificates. Thematic clusters offer a helpful way to support CU Denver student readiness for careers and social change. In a newly designed Core Curriculum, faculty are encouraged to work collaboratively to develop new certificates that students may achieve while completing the courses included in a thematic cluster.

Capstones. Students may take an additional upper-division interdisciplinary capstone course in their major area or School/College to support their integrated learning and to complete one of the clusters/certificates below.

New Core Objectives, Outcomes, and Skills

The RCwg proposed new CU Core Curriculum reflects our efforts to recommend a coherent educational program guided by clear and compelling educational objectives, learning outcomes, and essential skills. We employ each of these terms in the following ways:

- Program educational objectives: broad statements describing students' post-degreeattainment career and community accomplishments. These inform instructional design and course-to-course relationships.
- **Program learning outcomes**: statements of measurable and observable skills that students should be able to demonstrate upon completion of core requirements.
- *Core skills and abilities*: practices that can be measured or directly observed in particular courses, which support the outcomes and long-term objectives.

Program Educational Objectives

The following statements describe the post-degree-attainment practices of CU Denver students who have completed the University's core curriculum. The subject for each Core Objective below should be understood as the result of completing all Core requirements.

- **Core Objective 1: An ethic of action:** CU Denver students are engaged civic participants utilizing their knowledge in service to their communities.
- *Core Objective 2: An ethic of advocacy*: CU Denver students support change efforts in a variety of environments (workplace, community, state, national, global).
- *Core Objective 3: An ethic of awareness*: CU Denver students perceive and consider the pressing issues of the time, informed by a wide range of perspectives and experiences.

Program Learning Outcomes and Durable Skills

The following statements describe the outcomes students will be able to demonstrate as a result of a *series of core courses*. Each learning outcome should be the result of a set of core courses, not the result of a single course. The skills and abilities associated with each outcome, however, can be learned and measured within a single core course. The skills and abilities for each of the Core Learning Outcomes below should not be considered in conflict with gtPathways Learning Outcomes, which articulate knowledge area and competency outcomes, a

level of attention that differs somewhat from our focus here. Instead, the gtPathways LOs should be guide selection and design of courses that are offered within any particular thematic cluster.

Core Learning Outcome 1: Integrative Problem-Solving (supports Core Objective 3): Students will be able to recognize a wide range of perspectives about a complex problem and employ a range of disciplinary and transdisciplinary strategies (e.g., social, economic, scientific, mathematical, global, historical, etc.) to address the problem.

Core Skills and Abilities for Learning Outcome 1:

- recognition and application of disciplinary perspectives and methods
- recognition and application of global, social, ethical, and cultural perspectives
- ability to engage in observation and hypothesis making and testing
- recognition and application of logical reasoning
- understanding of historical, social, and institutional forms of marginalization, access, and rights
- a conceptual understanding of what constitutes complex problems

<u>Core Learning Outcome 2: Effective and Strategic Communication (supports Core Objectives 1 and 2):</u> Students will be able to effectively communicate across multiple modes to different audiences.

Core Skills and Abilities for Learning Outcome 2:

- ability to define the purposes of a communication and effectively utilize rhetorical tools, argument strategies, and research to craft an argument
- exploration and application of varying genres, formats, platforms, and techniques for creating communication
- ability to differentiate communication product among audiences (including distribution and circulation)
- ability to engage in effective feedback and revision processes
- understanding of how meaning making occurs within individuals, groups, cultures, communities, and systems

<u>Core Learning Outcome 3: Critical and Creative Thinking (supports all the Core Objectives):</u> Students will be able to engage in effective critical and creative thinking practices applicable to a wide range of topics.

Core Skills and Abilities for Learning Outcome 3:

- ability to engage in critical and creative thinking and action in a range of contexts
- ability to critically interpret, analyze, and differentiate a variety of texts, genres, and formats
- ability to be self-reflexive and to contextualize and describe how a student's personal experience and background is similar to and varies from the personal experiences and backgrounds of others

<u>Core Learning Outcome 4: Data Analysis and Application (supports Core Objective 1 and 3):</u> Students will be able to analyze and apply various forms of quantitative reasoning and data (e.g., statistics, visual data, empirical data, observational data, etc.) to understand various phenomena and to address various problems.

Core Skills and Abilities for Learning Outcome 4:

- ability to utilize various forms of quantitative reasoning to understand, engage with, and work to solve problems
- ability to perform accurate calculations, to translate between representations and draw meaningful insight from them
- ability to develop or apply mathematical and/or statistical models
- understand and employ technological and data science literacy (including understanding, assessing, and utilizing current and emerging technologies and machine learning, such as AI, etc.)
- ability to interpret and apply forms of data in addition to quantitative data, including visual and qualitative data

<u>Core Learning Outcome 5: Teamwork and Collaboration (supports all the Core Objectives):</u> As a result of the Core, students will be able to collaborate with others from different academic, disciplinary, and cultural backgrounds.

Core Skills and Abilities for Learning Outcome 5:

- ability to address and solve complex problems collaboratively
- skills in listening and responding to feedback and resolving conflict when it arises
- skills in sharing insights and helpful feedback with group members
- ability to facilitate inclusive practices that are respectful to all group members

In sum, the proposed Reimagined CU Denver Core Curriculum is characterized by the features discussed above, which include:

- A focus on integrated learning
- The use of thematic clusters to arrange and structure learning experiences
- High level educational objectives
- Learning outcomes and skills
- Ease of transfer

The remaining sections of this report offer an overview of the work of the RCwg, including its processes, its research findings, and its rationale for specific core recommendations.

Organizing Ourselves: The Principles and Values that Guided the RCwg

A significant step in the RCwg's process was to identify the principles and values that guided our process, which became guardrails for our collective work throughout the year. These principles were identified through iterative dialogue, and included:

- 1. Utilize an inclusive conversation and process
- 2. Operate with transparency
- 3. Honor and learn from the past
- 4. Practice decision-making that is data-informed
- 5. Consider financial impacts of changes on programs and be transparent about it
- 6. Align with university strategic plan
- 7. Foreground action-oriented recommendations
- 8. View requirements from a strengths-based/asset-based perspective
- 9. Consider best interest perspectives of students (outcomes of Core) and faculty (contributions to Core)

The group's work followed this general process: 1) collect data: review student success and current core data, meet with experts, and conduct research into national and regional core trends; 2) develop objectives, outcomes, and skills; 3) develop a new core structure based on the data and new objectives, outcomes, and skills. A more detailed summary of the work for each meeting is in the appendix.

Familiarizing Ourselves: A Deep Dive into the Current CU Denver Core Curriculum

The current university core, which was developed more than thirty years ago but has been revised numerous times since, is grounded in a liberal arts philosophy of education "in order to develop a broad set of academic skills for the baccalaureate student and to establish a foundation for lifelong learning" (https://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements/#text). The Core

curriculum "develops multiple literacies, stimulates creative thinking, and utilizes technology," all of which remain essential to academic and workplace success. Important to its status as an equity-serving and Asian American and Native American Pacific Islander-serving institution, as well as its commitment to retaining our status as a Hispanic-serving institution, the university faculty created a core "that engages students in developing sensitivity to diversity and developing their place in an urban environment, as well as in the rapidly changing global environment."

To support students in achieving these goals, the current core includes:

- 9-10 credit hours in the "intellectual competencies" of composition (6), and mathematics (3-4);
- 19-24 credit hours in the knowledge areas of the arts (3), humanities (3), behavioral sciences (3), social sciences (3), and natural and physical sciences, mathematics (7-8);
- 3 credit hours in courses that emphasize international perspectives; and
- 3 credit hours in courses that emphasize cultural diversity.

The total core = 34-40 credit hours.

Current Core Learning Outcomes

The core learning outcomes and rubrics for the undergraduate general education program were developed by faculty to ensure students were achieving the same learning outcomes across a variety of core courses. The learning outcomes for math, for example, are "calculate, represent, interpret, and model," while the outcomes for composition are "purposeful writing, revising and writing process, argument and analysis, critical reading, rhetorical knowledge, research, and technology/multimodality." Assessment of these courses measures students' abilities to demonstrate each of these outcomes. Faculty have also constructed a shared set of outcomes and rubrics for each of the knowledge areas (e.g., "terms and theories" for social sciences and "textual analysis" for the humanities) and the international perspectives (e.g., "global contexts") and cultural diversity requirements (e.g., "marginalization"). The full list of learning objectives can be found here: https://www.ucdenver.edu/docs/librariesprovider113/learning-outcomes/11-17-15-gen-ed-cover-page.pdf?sfvrsn=d4486fba 2.

Conceptions of Problems with the Current Core

Provost Nakuma's charge for the working group implied students need a core that teaches more emergent skills and abilities and better values their documented prior learning. There is also a need for more experiential learning—a high-impact practice that has been shown to retain students and help them succeed after graduation—throughout the core. The charge also

asked the working group to consider core models that support students' academic achievement—that are complementary to their chosen majors (given that students often change majors)--while also allowing them to complete their degrees in a timely manner. These concerns directed the group's consideration of national and local data on academic and workplace skills and transferability (from other institutions and across our own schools and colleges). In the section that follows, we discuss our research findings.

Familiarizing Ourselves: Exploring the National, State, and Local Data Landscape

We reviewed several types of data to help the group: 1) identify the academic and workplace skills Colorado employers value; 2) understand the purposes and structures of the core in higher education and, more specifically, in peer, regional, and innovative institutions; 3) assess the effectiveness of the core in helping students succeed academically at CU Denver; and 4) discover what CU Denver students and faculty think the purpose of the core should be.

Workplace Skills Data

To identify the academic and workplace skills Colorado employers value, the group invited Jeremy Lingle to present on the post-graduate skills currently in demand nationally and locally. Jeremy shared the core skills chart below, which shows the percentage of organizations that considered the skill to be "increasingly important over the next five years" (p. 32 of the 2023 Colorado Talent Pipeline Report).

01.	Creative Thinking (73.2%)	06.	Systems Thinking (59.9%)
02.	Analytical Thinking (71.6%)	07.	Al and Big Data (59.5%)
03.	Technological Literacy (67.7%)	08.	Motivation and Self Awareness (58.9%)
04.	Curiosity and Lifelong Learning (66.8%)	09.	Talent Management (56.4%)
05.	Resiliency, Flexibility, and Agility (65.8%)	10.	Service Oriented (54.8%)

The Talent Pipeline Report data corresponds with a 2021 employer survey research report published by the AACU, which states that "critical thinking and analysis, problem-solving, teamwork, and communication through writing and speaking have consistently been ranked highest over time" (p. 5 of *How College Contributes to Workforce Success* Report).

Peer Institution Research

In order to understand the purposes and structures of the core in higher education and, more specifically, in peer, regional, and innovative institutions, the group compared the CU Denver core documents, including purpose and outcome statements, with those of our peer institutions and sister campuses. The majority of peer institutions have adopted a distributed core model, which exposes students to multiple disciplines across the arts and humanities, social and behavioral sciences, and natural sciences and includes writing and math requirements. Several universities, like the University of Northern Illinois, have created a core of clustered courses around contemporary social problems and issues. Others, like UCCS and Minerva University, have crafted a carefully sequenced set of skills-based courses and essential learning outcomes that culminate in a complex experiential learning experience or capstone project. On January 11, the group met with Ben Nelson, co-founder of Minerva University, and spent most of its time learning how to research, determine, and assess the durable skills students need from the core curriculum. We learned that assessment is key to any revision. Cal State Fullerton, for example, constructed a full-scale assessment model for their core. They were able to create a set of core outcomes that were embedded in courses across the curriculum as way of assessing student learning outcomes, but they did it in a way that built assessment into the teaching itself. Minerva has done something similar.

Based on our research of local, regional, and national universities, we created a taxonomy of the most common core models or approaches: the distributed model, the clustered topic model, the sequenced skills-based model, the embedded model, and a hybrid model, which often included a mix of the distributed and skills-based models. We then used this taxonomy to assess the advantages and disadvantages of each model for students and faculty and to determine the best way forward for CU Denver. Our current model is a distributed model, and, because of the importance of gtPathways and transferability, we decided to keep this model as the backbone of our proposed new core. However, as the data below will show, students and faculty are also interested in core that addresses pressing social problems and helps them develop durable academic and workplace skills. Thus, we mapped topic clusters and an optional capstone (experiential learning and interdisciplinary) course onto the gtPathway-aligned distribution model. We will discuss this new hybrid model in more detail in a later section.

Retention, Degree Completion, and Transfer Data

Throughout the process, the group reviewed AACU (American Association of Colleges and Universities) research on the importance of common high-impact practices and value rubrics to student academic success and the essential transferable skills students need to adapt to rapidly changing workplace environments. More pragmatically, we reviewed HLC accreditation requirements (minimum of 30 credits, whether through a traditional distributed curricula or through an embedded model) and the state gtPathway policy (up to 31 credits of gtPathway courses must count toward general education). Relatedly, we invited the Assistant Vice Chancellor of Student Success Erika Larson and Director of Transfer Initiatives Samantha Kelly to

speak with us about the importance of transferability. They recommended the new core be even more closely aligned with gtPathways, since those are the courses many of our students are bringing from high schools, community colleges, and other universities. Erika also met with one of the advisors at UCCS, which implemented a sequenced skills-based model core ten years ago. She reported that while a great deal of thought went into the new UCCS Compass Curriculum, they were hoping to more closely align it to the gtPathway curriculum in the future. Currently, when students transfer in with 60 or more credits, UCCS only waives part of the core, and some students are left taking 18 additional credits. The working group regularly acknowledged how important it is to consider the experiences of transfer students when reimagining the core curriculum. Because of our large transfer population, we need to keep in mind the importance of state-wide articulation agreements and documented prior learning and make sure our new core will not make it more difficult for transfer students. While it will be important for CU Denver to differentiate its core from those of other institutions, especially neighboring institutions, it will be equally important to maintain state-wide and local transfer agreements.

To assess the effectiveness of the core in helping students succeed academically at CU Denver, the working group also reviewed OIRE data on student retention and graduation rates. While these data do not tell us whether the core directly affects retention and graduation rates, they do suggest that too many students are experiencing barriers to degree completion. A reimagined core should play a role in lessening these barriers and/or supporting students in overcoming them. Because our institutional data does not yet offer nuanced information about barriers to degree completion or how the core impacted students, OIRE distributed a survey, which included two questions about the core curriculum, to current students and faculty. We discuss the survey questions and results below.

Student and Faculty Perspectives on the Core

To investigate what CU Denver students and faculty think the purpose of the core should be, our working group constructed two questions for the OIRE student survey—one focused on the purposes for the core and the other focused on its structure. The questions came out of our research on and discussions about the types of essential skills (listed below) we think students should develop and demonstrate over the course of the core curriculum and whether students prefer a flexible or sequenced core structure.

Essential Skills

The core should support students in learning:

 Skills related to civic literacy and a critical understanding and appreciation of cultural and social histories and identities.

- Skills related to logical, ethical, quantitative, and scientific reasoning, as well as creative thinking.
- How to use multiple forms of reasoning and analysis to address complex problems.
- How to communicate across a variety of modes to and for diverse audiences.
- How to evaluate multiple perspectives and collaborate effectively with others.

When our working group members prioritized the skills listed above, they ranked developing academic skills and civic and socio-cultural skills as the two highest priorities for the core, while the students ranked learning transferable workplace skills, succeeding academically, and broadening and deepening perspectives on being human as the three most important purposes for the core. The survey results correspond with recent articles written by students, which argue for more courses on emotional, social, and financial literacy in the core. The survey also shows a strong preference for a flexible core structure over a sequenced set of courses, so the working group will have to consider this when constructing curricular models.

Survey Questions and Results

Survey Question One: The CU Denver Core Curriculum courses ensure students make progress toward fundamentally important objectives. We would like to know what objectives you consider the most important for students. Please select how important each of the following objectives for CU Denver Core Curriculum courses are. Results are pictured below the question.

	Not at all Important	Slightly Important	Moderately Important	Extremely Important
learn and develop skills to succeed academically (e.g., reading and writing carefully, persuasive speaking, interpreting and utilizing quantitative data, etc.)	0	0	0	0
learn and develop skills to be an engaged and successful participant in your local, national, and global communities (e.g., familiarization with social, ethical, cultural, religious, and economic differences among people, understanding the sources of conflict, etc.)	0	0	0	0
learn and develop skills across disciplines and perspectives to address complex social problems (i.e. climate change, discrimination, civil rights, diabetes/cancer/other health challenges, food security/scarcity, capital punishment, etc.)	0	0	0	0
	Not at all Important	Slightly Important	Moderately Important	Extremely Important
learn and develop essential transferrable skills across a wide range of jobs or careers (teamwork, active listening, adaptability, communication across media, facility with new technologies, etc.)	0	0	0	0
broaden and deepen your perspective on being human (e.g., understand human historical trends, appreciate ideas citizens need to solve issues, speak and understand the importance knowing a second language, interpret data, know scientific ways of investigating the world, become familiar with ethical and theoretical approaches to understanding life, gain insight into creative fields like art, dance, and fiction, appreciate different political and	0	0	0	0
economic systems, etc.)				

Importance of Core Curriculum Objectives

	Extremely Important	Moderately Importa	Slightly Important	Not at all Important
Broaden and deepen your perspective on being human	44%	37%	13%	6%
Learn and develop essential transferrable skills across a wide range of jobs or careers	60%	27%	10%	3%
Learn and develop skills across disciplines and perspectives to address complex social problems	42%	34%	17%	7%
Learn and develop skills to be an engaged and successful participant in your local, national, and global communities	39%	34%	21%	6%
Learn and develop skills to succeed academically	49%	35%	14%	2%

Survey Question Two: For the CU Denver Core Curriculum do you prefer flexibility or sequence? Results are pictured below the question.

- A. Flexibility students may take Core courses at any time during their undergraduate careers at CU Denver
- B. Sequence students should complete Core course requirements during their first year at CU Denver

 Strongly prefer flexibility 	\circ	Strongly	prefer	flexibility
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- Somewhat prefer flexibility
- No preference between flexibility and sequence
- Somewhat prefer sequence
- Strongly prefer sequence

Preference towards Flexibility vs Sequence for Core Curriculum

Strongly prefer flexibility	55%
Somewhat prefer flexibility	20%
No preference between flexibility and sequence	13%
Somewhat prefer sequence	7%
Strongly prefer sequence	5%

It should be noted that the survey did not define *flexibility* for the students, so it is difficult to assess precisely what each student meant when they prioritized flexibility. Because it was juxtaposed with a *sequenced* approach to the core, we can infer it to mean required courses can be taken at any time, but we know our understanding of student perspectives and experiences, based on this survey, is limited. In addition to interpreting and discussing the survey results, the group researched the student personas located in the CU Denver's Strategic Enrollment Plan. During our Spring and October meetings, the group chose a persona and simulated that student's journey through our current core curriculum and then through a proposed new core curriculum. This exercise helped the group better define desired core outcomes for the types of students currently attending CU Denver, as well as the types of students we hope to attract and recruit.

Learning along the Way: Gathering and Making Sense of Feedback

Throughout the working group's yearlong exploration of the current core, other core curricula, and the possibilities for a new CU Denver Core Curriculum, we gathered feedback from several key constituent groups. The table below reflects the various feedback conversations invited through organized presentations; for each (and extended more broadly), additional anonymous feedback was invited via Qualtrics survey. Because this report responds to the feedback, we have not yet solicited feedback on the report itself.

DATE	LOCATION	AUDIENCE
17-Sep	zoom	Assoc. Deans Meeting
18-Sep	Chancellors Conference Room, Lawrence Street Center	Dean's meeting
1-Oct	zoom	Faculty Assembly
4-Oct	zoom	UCDALI
8-Oct	zoom or North Classroom 3034L - Dean's Conference Room	Staff Council
10-Oct	zoom	Chairs and Directors meeting
25-Oct	Student Commons 1600	SGA
28-Oct	Lawrence Street Center	Cabinet
6-Nov	LSC Terrace Room	Campus-wide community feedback

Detailed notes were taken throughout the various discussion and feedback meetings noted above. Additionally, key themes from the feedback on revisions to the CU Denver core curriculum effort were identified. The key themes based on feedback from the CU Denver community are listed below and were utilized to refine and update this proposed Core Curriculum.

1. Teamwork and Collaboration

- Challenge: Evaluating whether a course fosters collaboration.
- Suggestions: Courses should be designed to include teamwork and collaborative elements.
- Status: For consideration during design and planning cycle.

2. Core Learning Outcomes

- A. Data Analysis and Application: Expand to include different forms of data (quantitative and qualitative) to honor various ways of understanding phenomena.
 - Social and Global Perspectives: Make issues of inclusivity and justice more overt in the Outcomes rather than just in the Objectives.
 - Status: Incorporated into proposal.
- B. Outcome 5: Include the ability to work creatively and collaboratively in Outcome 5 to foster cross-collaboration.
 - Status: Incorporated into proposal.
- C. Outcome 4: Address information literacy under Outcome 4 to ensure students are equipped with essential skills.
 - Status: Incorporated into proposal.

3. Inclusivity and Justice

- Different Forms of Knowing: Emphasize learning to listen to and analyze community voices through diverse data gathering strategies, including indigenous and feminist methodologies.
- DEI (Diversity, Equity, and Inclusion): Support for including more DEI elements in the curriculum.
- Status: Incorporated into proposal; for additional consideration during design and planning cycle.

4. Transfer Students

- Flexibility: Ensure courses connect to other universities and allow flexibility for transfer courses to satisfy requirements.
- Transfer-Friendly Structure: Create a recommendation that reduces barriers for transfer students, including compliance with CDHE, HLC, GT pathways, and prior learning.
- Status: Incorporated into proposal.

5. Global Awareness and Advocacy

- Global Citizenship: Emphasize the importance of preparing students to become global citizens, considering global processes and advocacy.
- Status: Incorporated into proposal; for additional consideration during design and planning cycle.

6. Core Curriculum Credits

- Credit Reduction: Discuss the possibility of reducing core curriculum credits, especially in light of potential changes to degree requirements in Colorado.
- Minimum Credits: Consider the minimum number of credits needed to achieve objectives and outcomes.
- Status: Incorporated into proposal. Total core credits reduced to 31

7. High-Impact Practices

- Integration: Map high-impact practices into the core curriculum to enhance student learning experiences.
- Status: Incorporated into proposal; for additional consideration during design and planning cycle.

8. Co-Curricular Experiences

- Embedding: Discuss embedding co-curricular experiences into the new core curriculum to enrich student learning.
- Status: For consideration during design and planning cycle.

9. Al and Data Science

- Inclusion: Consider how AI might impact the core curriculum and include AI-related competencies.
- Status: Not adequately discussed; for consideration during design and planning cycle.

10. Student Interests and Lifelong Learning

- Balance: Balance career-oriented skills with broader educational interests and lifelong learning.
- Electives: Ensure the core curriculum captures the wider consideration of student interests beyond just career skills.
- Status: Incorporated into proposal.

11. Creative and Collaborative Work

- Outcome 5: Include the ability to work creatively and collaboratively in Outcome 5 to foster cross-collaboration.
- Status: Incorporated into proposal.

12. International Perspectives

- Objective 2: Add international elements to Objective 2 to broaden students' global understanding.
- Status: Incorporated into proposal.

13. Information Literacy

- Outcome 4: Address information literacy under Outcome 4 to ensure students are equipped with essential skills.
- Status: Incorporated into proposal.

14. Student Experience

- Impact on Progression: Consider the impact of the new core on student progression, especially for transfer students and those from thematic learning campuses.
- Status: Incorporated into proposal.

Recommended New Core Curriculum

The introduction offered a snapshot of our recommended new core, and here we present it with more context and rationale, along with the alternative models the group considered during the process. After researching core trends, workplace skills, and student and faculty perspectives and assessing the core's impact on transfer students; the RCwg carefully constructed and synthesized a set of new core objectives, outcomes, and skills. As already mentioned in the introduction, the list below incorporates the charge's call for more emergent skills and abilities, as well as suggestions from numerous faculty, staff, and student feedback sessions. Creative thinking, analytical thinking, communication, and technological literacy skills were included since they continue to be in high demand in academic, social, community, and workplace contexts. The group also identified particular emergent skills related to pressing social issues, such as AI, data (mathematical, visual, empirical, etc.) analysis, democracy, and social justice, and they foregrounded three ethics—a set of principles that guide behavior—they hope students internalize and practice once they graduate from CU Denver and complete the core curriculum. The list has been reviewed and revised numerous times and has served as the foundation for the recommended core structure.

New Recommended Core Objectives, Outcomes, and Skills

The Core Curriculum at CU Denver is an educational program with explicit objectives, learning outcomes, and essential skills. We are using each of these terms in the following ways:

- Program educational objectives: broad statements describing students' post-degreeattainment career and community accomplishments. These inform instructional design and course-to-course relationships.
- Program learning outcomes: statements of measurable and observable skills that students should be able to demonstrate upon completion of core requirements.
- Core skills and abilities: practices that can be measured or directly observed in particular courses, which support the outcomes and long-term objectives.

Program Educational Objectives

The following statements describe the post-degree-attainment practices of CU Denver students who have completed the University's core curriculum. The subject for each Core Objective below should be understood as a result of completing all Core requirements.

- **Core Objective 1: An ethic of action:** CU Denver students are engaged civic participants utilizing their knowledge in service to their communities.
- *Core Objective 2: An ethic of advocacy*: CU Denver students support change efforts in a variety of environments (workplace, community, state, national, global).

• **Core Objective 3:** An ethic of awareness: CU Denver students perceive and consider the pressing issues of the time, informed by a wide range of perspectives and experiences.

Program Learning Outcomes and Durable Skills

The following statements describe the outcomes students will be able to demonstrate as a result of a *series of core courses*. Each learning outcome should be the result of a set of core courses, not the result of a single course. The skills and abilities associated with each outcome, however, can be learned and measured within a single core course.

<u>Core Learning Outcome 1: Integrative Problem-Solving (supports Core Objective 3):</u>
Students will be able to recognize a wide range of perspectives about a complex problem and employ a range of disciplinary and transdisciplinary strategies (e.g., social, economic, scientific, mathematical, global, historical, etc.) to address the problem.

Core Skills and Abilities for Learning Outcome 1:

- recognition and application of disciplinary perspectives and methods
- recognition and application of global, social, ethical, and cultural perspectives
- ability to engage in observation and hypothesis making and testing
- recognition and application of logical reasoning
- understanding of historical, social, and institutional forms of marginalization, access, and rights
- a conceptual understanding of what constitutes complex problems

<u>Core Learning Outcome 2: Effective and Strategic Communication (supports Core Objectives 1 and 2):</u> Students will be able to effectively communicate across multiple modes to different audiences.

Core Skills and Abilities for Learning Outcome 2:

- ability to define the purposes of a communication and effectively utilize rhetorical tools, argument strategies, and research to craft an argument
- exploration and application of varying genres, formats, platforms, and techniques for creating communication
- ability to differentiate communication product among audiences (including distribution and circulation)
- ability to engage in effective feedback and revision processes

 understanding of how meaning making occurs within individuals, groups, cultures, communities, and systems

<u>Core Learning Outcome 3: Critical and Creative Thinking (supports all the Core Objectives):</u> Students will be able to engage in effective critical and creative thinking practices applicable to a wide range of topics.

Core Skills and Abilities for Learning Outcome 3:

- ability to engage in critical and creative thinking and action in a range of contexts
- ability to critically interpret, analyze, and differentiate a variety of texts, genres, and formats
- ability to be self-reflexive and to contextualize and describe how a student's personal experience and background is similar to and varies from the personal experiences and backgrounds of others

<u>Core Learning Outcome 4: Data Analysis and Application (supports Core Objective 1 and 3):</u> Students will be able to analyze and apply various forms of quantitative reasoning and data (e.g., statistics, visual data, empirical data, observational data, etc.) to understand various phenomena and to address various problems.

Core Skills and Abilities for Learning Outcome 4:

- ability to utilize various forms of quantitative reasoning to understand, engage with, and work to solve problems
- ability to perform accurate calculations, to translate between representations and draw meaningful insight from them
- ability to develop or apply mathematical and/or statistical models
- understand and employ technological and data science literacy (including understanding, assessing, and utilizing current and emerging technologies and machine learning, such as AI, etc.)
- ability to interpret and apply forms of data in addition to quantitative data, including visual and qualitative data

<u>Core Learning Outcome 5: Teamwork and Collaboration (supports all the Core Objectives):</u> As a result of the Core, students will be able to collaborate with others from different academic, disciplinary, and cultural backgrounds.

Core Skills and Abilities for Learning Outcome 5:

ability to address and solve complex problems collaboratively

- skills in listening and responding to feedback and resolving conflict when it arises
- skills in sharing insights and helpful feedback with group members
- ability to facilitate inclusive practices that are respectful to all group members

Group Brainstorming for Core Structure (Requirements)

After the group constructed the above objectives, outcomes, and skills, they used them along with AAC&U value rubrics, to inform their development of a core requirement structure. We also relied on the taxonomy of core structures we created based on our research on core trends: the distributed model, clustered topic model, sequenced skills-based model, embedded model, and hybrid model, which often included a mix of the distributed and skills-based models. Finally, the group used the SEM student personas to assess the advantages and disadvantages of each proposed model for students. Members of the working group joined smaller groups to brainstorm core requirements based on the above information, and two alternative models, as well as a hybrid of the two, emerged from these sessions.

Group One proposed a model that would embed the new objectives, outcomes, and skills within courses across campus. Students would be required to take 18-21 credits outside their major, and courses would be interdisciplinary, team-taught, and assessed. Transfer courses would also be evaluated based on the outcomes. Group Two proposed a 30-credit skills-based structure based on the new objectives, outcomes, and skills and relevant topics. They included a data analysis requirement and encouraged interdisciplinarity by requiring students to take three courses outside their major. Requirements in writing/communication, quantitative and data analysis, and teamwork/collaborative problem-solving could be met by courses across campus. Below is a chart explaining the features of the two group models and comparing them to our current core and a hybrid version. One major limitation of all the draft models was transferability, particularly in-state transferability. The group asked AVC of Student Success Erika Larson and Director of Transfer Initiatives Samantha Kelly about the obstacles each of the draft models might raise for transfer students and students with prior learning (both important considerations in the Provost's Charge), and they stated that a core closely aligned with the 31credit gtPathways core was the best solution for transfer students, including students who graduate from high school with college or college-ready credits or other forms of documented prior learning.

The group agreed that ease of transfer and degree completion were top considerations. Our mission to be an equity-serving institution includes making core completion less expensive and time consuming for all our students. Although none of the draft models below were adopted wholesale, all three informed the structure the group finally approved.

Current Core Group One Group Two Hybrid Based on Both Groups

Total credits	34-40	30 credits	30 credits	31credits of gtPathways + 9
required (size)	04 40	[18-21 credits	(10 courses)	credits of upper-division skills-
required (3126)		outside the School /	(10 courses)	based courses in the major or
		College OR Major OR		college
		Meta Major]		a. GtPathways fully
		Meta Majorj		accepted; met within
				lower division of CU
				Denver Core
				b. Note: outcomes-based
				teaching at upper
				division (uniqueness of
				CU Denver); may result
				in students not taking courses outside
				college/school c. Problem to reconsider –
				c. Problem to reconsider – how to address
				capstone course that is
Compositivel	2			trans-disciplinary?
Conceptual	2 competencies			gtPathways core + Cultural
requirements	(Comp/Math),			Diversity (lower division; satisfied
	5 knowledge			by gtPathways), Data
	areas			Science/Analysis (upper division
	(A/H/NS/BS/SS),			within major/college),
	2 disposition			Global Perspectives (lower
	areas			division; satisfied by gtPathways),
	(CD/IP)			Core courses offered in major
				must, collectively, satisfy all 5
				LOs (intent is to ensure accountability to Core, reduce
				loopholes)
Structure	Distributed	Embedded structure,	Distributed and	Distributed and skills-based
	structure,	designates courses	skills-based	structure, gtPathways core +
	multiple course	as satisfying LOs;	structure, Core	sequenced upper-division
	options	core courses utilize	Learning	durable skills-based
	(somewhat	HIPs and experiential	Outcome 1: 3	interdisciplinary courses
	flexible);	learning; core	courses outside	embedded in the major or college.
	outcome-based,	courses include	major	
	including critical	writing/communicati	CLO2: 3	
	thinking,	on; each course	writing/comms	
	literacies, and	meets 4 of 5 LOS;	courses,	
	technology	team teaching across	developmental	
		disciplines	sequence	
			CO3: 1 course	
			(interest	
			exploration)	
			CO4: 2 courses	
			(quant; data)	
			CO5: 1 course	

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Sequence	Lower division	Highly flexible but 18-	Highly flexible,	31 lower-division gtPathway
	heavy with many	21 credits outside of	writing is	credits are flexible but skills-
	course options.	major; multiple	sequenced,	based sequence (upper division
		opportunities to	though others	focuses upon multidisciplinarity,
		demonstrate	are not clearly	problem-solving, synthesis,
		proficiency; can be	sequenced	demonstration of
		satisfied with minors,		learning/presentation/seminar) is
		certificates, and		less so. The lower-division skills
		microcredentials		development assessed within
				courses.
Objectives	N/A (Broad set	3 (ethics of	3 (ethics of	Retain 3 ethics
	of academic	awareness, action,	awareness,	
	skills)	advocacy)	action,	
			advocacy)	
Learning	Tied to	5 New LOs	5 New LOs	Retain 5 New LOs
Outcomes	knowledge	(integrative problem	(multiple	
	areas	solving, effective &	perspectives,	
		strategic	effective	
		communication,	communication	
		critical thinking, data	, critical	
		analysis &	thinking,	
		application,	quantitative	
		teamwork &	reasoning/data	
		collaboration)	analysis &	
			application,	
			collaboration,	
Uniquenesses	none	Senior experience to	Oriented	Cultural Diversity, Global
(CU Denver)		assess core learning	towards	Perspectives, Data Science, and
		outcomes	student	upper-division skills development
			knowledge of	instruction and assessment.
			contemporary	
	1			
			topics and Data	
			Science	
gtPathways	Directly aligned	Credits accepted;	·	Fully accepted as satisfying 31 of
gtPathways alignment	to all knowledge	courses evaluated to	Science	Fully accepted as satisfying 31 of 40 credits of core requirements
	to all knowledge areas except	courses evaluated to determine Core LO	Science	
	to all knowledge areas except Cultural	courses evaluated to	Science	
	to all knowledge areas except Cultural Diversity and	courses evaluated to determine Core LO	Science	
	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO	Science	
alignment	to all knowledge areas except Cultural Diversity and	courses evaluated to determine Core LO satisfaction	Science Unspecified	40 credits of core requirements
	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Science Unspecified Courses	40 credits of core requirements May result in loophole in
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction	Science Unspecified Courses tailored toward	40 credits of core requirements May result in loophole in development of advanced skills if
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Science Unspecified Courses tailored toward students'	40 credits of core requirements May result in loophole in
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Science Unspecified Courses tailored toward students' interests and	40 credits of core requirements May result in loophole in development of advanced skills if learning is not assessed carefully
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Science Unspecified Courses tailored toward students' interests and relevant topics,	May result in loophole in development of advanced skills if learning is not assessed carefully
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Courses tailored toward students' interests and relevant topics, as well as the	40 credits of core requirements May result in loophole in development of advanced skills if learning is not assessed carefully
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Courses tailored toward students' interests and relevant topics, as well as the development of	A0 credits of core requirements May result in loophole in development of advanced skills if learning is not assessed carefully If current core course is revised, it will need to meet 3 of 5 new LOs
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Courses tailored toward students' interests and relevant topics, as well as the development of durable	May result in loophole in development of advanced skills if learning is not assessed carefully If current core course is revised, it will need to meet 3 of 5 new LOs Current core restrictions will need
alignment	to all knowledge areas except Cultural Diversity and International	courses evaluated to determine Core LO satisfaction All Schools/Colleges	Courses tailored toward students' interests and relevant topics, as well as the development of	A0 credits of core requirements May result in loophole in development of advanced skills if learning is not assessed carefully If current core course is revised, it will need to meet 3 of 5 new LOs

				offer to core, which depts can offer which courses) and must consider other Core policies Present 9 School/College credits as CU Denver's commitment to the core throughout and into major
Summary	Limitation – too many credits beyond HLC minimum (30) and gtPathway requirement (31)	Limitation – implications of faculty time/ university cost/ etc. re: team teaching (pedagogical differences), burden placed on Jr/IRC faculty, concern that Core can be satisfied with minors, certificates, and microcredentials	Limitations – it's not clearly linked to gtPathway courses and categories	Limitation – too many credits beyond gtPathway requirement (31)

New Recommended Core Structure (Requirements)

As mentioned above, the consensus of the group was to prioritize transferability, particularly instate transferability, and timely degree completion, and the recommended new core structure reflects those priorities. Below is the state gtPathway core (31 credits), and our university transfer team recommended we stay closely aligned with that core and the state policy that "individual institutions of higher education...conform their own core courses" to the 31-credit lower division GT-Pathways curriculum. The gtPathways core includes three core requirements in written communication (6 credits), mathematics (3 credits), and natural physical sciences (7) and three area requirements in arts and humanities (6 credits), history (3 credits), and social and behavioral sciences (3 credits). They also require an additional three credits in any of those three areas.

Written Communication

6 Credit Hours

2 courses

Introductory Writing
 <u>Course</u> (GT-CO1)
 and <u>Intermediate Writing</u>
 <u>Course</u> (GT-CO2)

OR

Intermediate Writing
 Course (GT-CO2)
 and Advanced Writing
 Course (GT-CO3)

Mathematics

3 Credit Hours

1 course (or a series of three 1-credit hour courses)

• (GT-MA1)

Natural and Physical Sciences

7 Credits Hours

2 courses, one of which must be GT-SC1:

- Course with Required <u>Laboratory</u> (GT-SC1)
- <u>Lecture Course Without</u> <u>Required Laboratory</u> (GT-SC2)

Arts & Humanities, History, and Social & Behavioral Sciences

15 Credit Hours

Arts and Humanities

Arts and Humanities - 2 courses (minimum 3 credits each)

- Arts and <u>Expression</u> (GT-AH1)
- <u>Literature and</u>
 <u>Humanities</u> (GT-AH2)
- Ways of <u>Thinking</u> (GT-AH3)
- World
 <u>Languages</u> (must be Intermediate/200 level) (GT-AH4)

History

1 course (minimum 3 credits)

• (<u>GT-HI1</u>)

Social and Behavioral Sciences

1 course (minimum 3 credits)

- Economic or <u>Political</u> <u>Systems</u> (GT-SS1)
- Geography (GT-SS2)
- Human Behavior, <u>Culture</u>, or Social <u>Frameworks</u> (GT-SS3)

1 Additional Course

To reach a minimum of 15 credits, please select 1 additional course (minimum 3 credits) in Arts & Humanities or History or Social & Behavioral Sciences.

CU Denver Recommended Required Core Courses (gtPathways-aligned)

- 6 credits of multimodal communication
- 3 credits of quantitative reasoning
- 15 credits of Arts and Humanities, Behavioral and Social Sciences, History, Cultural Diversity (can include gtPathway arts and humanities, history, and SS & BS courses), and International (Global) Perspectives (can include gtPathway arts and humanities, history, and SS & BS courses)
 - Arts and Humanities 6 credits
 - History 3 credits
 - Social and Behavioral Sciences 3 credits
 - One of the above categories 3 credits
- 7 credits of Natural and Physical Sciences (including a 1 credit applied lab)

Total = 31 credits

Thematic Interdisciplinary Clusters with optional capstone course: students may complete a thematic cluster and/or certificate as part of their core, which will include an additional upper-division interdisciplinary capstone course in their major or college to complete. The clusters are detailed in the introduction and below is a brief summary.

Thematic Clusters (certificates)

These clusters are inherently interdisciplinary and intended to enhance the educational experience by making learning more relevant and engaging, while also preparing students for the complexities of the modern world. Each cluster includes courses representing multiple Core competencies and knowledge areas, and each may equal 12-18 credits (according to certificate policies). Students may need to satisfy core requirements outside of the cluster. Also, students may choose a cluster in or out of their disciplinary area. Regardless, the clusters are intended to make the core experience more coherent and flexible for students. Schools and colleges will need to work together to create truly interdisciplinary core clusters/certificates and capstone courses and incorporate the new objectives, outcomes, and skills into those clusters and capstones. It is important that the clusters include as many gtPathway courses in as many areas as possible for students who are both transferring in and out of the university.

Here are some examples of possible courses that might be included within thematic clusters in the proposed CU Denver Core Curriculum, accompanied by possible knowledge areas implicated within the thematic cluster: Cluster a. Sustainability (Natural and Physical Sciences (NPS); Behavioral Science (BS); Social Science (BS); Communication (Comm); Quantitative Reasoning (QR); History (H); Cultural Diversity (CD))

- 1. <u>Innovative Pathways to a Sustainable Future</u>: A course introducing first year students to the topic of sustainability, also supporting their development of academic success skills.
- 2. <u>Environmental Science 101: Introduction to Environmental Science</u>: Focuses on ecosystems, biodiversity, and sustainability practices.
- 3. <u>Sustainable Urban Development</u>: Examines sustainable practices in urban planning and development.
- 4. <u>Renewable Energy Systems</u>: Covers the principles and technologies behind renewable energy sources like solar, wind, and hydro power.

Cluster b. A Just Society (ex. SS/BS; Comm; CD; International Perspectives (IP); Arts & Humanities (A/H); H)

- 1. <u>Empowering Communities: Strategies for Social Justice and Equity:</u> A course introducing first year students to the topic of social justice and equity, also supporting their development of academic success skills.
- 2. <u>Introduction to Social Justice</u>: Explores the concepts of equity, justice, and human rights.
- 3. <u>Race, Class, and Gender</u>: Analyzes the intersections of race, class, and gender in society.
- 4. <u>Community Engagement and Advocacy</u>: Practical course involving community service- and advocacy-focused learning.

Cluster c. Technology and Society (ex. QR; A/H; H; Comm; BS/SS; IP; CD)

- 1. <u>Tech and Societies: Navigating the Digital Age</u>: A course introducing first year students to the topic of the role of technology in broader societal contexts, also supporting their development of academic success skills.
- 2. <u>Digital Literacy</u>: Teaches essential digital skills and the impact of technology on society.
- 3. <u>Ethics in Technology</u>: Discusses ethical issues related to technology, including privacy, security, and AI.
- 4. <u>History of Technology</u>: Examines the development of technology and its influence on human history.

Cluster d. Global Cultures (ex. CD; IP; Comm; BS; SS; A/H; H)

- 1. Exploring Global Cultures: Diversity, Difference, and Interconnectedness: A course introducing first year students to global communities and contexts, also supporting their development of academic success skills.
- 2. <u>World History</u>: Provides a broad overview of global historical events and movements.
- 3. Cultural Anthropology: Studies diverse cultures and their social structures.

4. <u>Global Health Issues</u>: Focuses on health challenges and solutions in different parts of the world.

Cluster e. Public Health, Personal Wellness (ex. IP; BS; SS; NPS; A/H; H; CD)

- 1. <u>Holistic Health: Integrating Public Health and Mental Well-being</u>: A course introducing first year students to global communities and contexts, also supporting their development of academic success skills.
- 2. <u>Introduction to Public Health</u>: Covers the basics of public health principles and practices.
- 3. <u>Nutrition and Wellness</u>: Examines the role of nutrition in maintaining health and wellness.
- 4. <u>Mental Health Awareness and Advocacy</u>: Addresses mental health issues and promotes strategies for mental well-being.

Cluster f. Living in Colorado (ex. NPS; SS; BS; H; A/H; CD)

- 1. <u>Discovering Colorado: Geographies and Communities</u>: A course introducing first year students to Colorado as an array of place-types ranging from urban to rural, also supporting their development of academic success skills.
- 2. <u>Urban Studies</u>: Examines the development, structure, and functioning of urban areas in Colorado, with a focus on Denver.
- 3. <u>Rural Sociology</u>: Studies the social structures, challenges, and opportunities in rural Colorado communities.
- 4. <u>Suburban Development</u>: Explores the growth and characteristics of suburban areas, including housing, transportation, and community life.
- 5. <u>Exurban Dynamics</u>: Investigates the unique aspects of exurban areas, where urban and rural characteristics intersect.

These courses are designed to provide students with a comprehensive understanding of each theme, integrating knowledge from various disciplines to enhance their learning experience. It may be possible that students decide to propose a thematic cluster not already represented but made up of current core courses (may not apply to certificates in the short term).

Where We Landed: Finalizing the Recommended Core Reimagined

The recommended new core reduces the minimum number of credit hours to 31 to ease the transfer and degree completion processes for students. To do so, it moves the current Cultural Diversity and International Perspectives requirements, which are essential to the mission of the university, into the lower-division area requirements. Students will be able to fulfill them with designated Arts and Humanities, History, and Behavioral and Social Sciences courses. Also, the area requirement categories were consolidated to align more closely with the gtPathways core categories. Students will take two Arts and/or Humanities courses instead of one course in Arts and one in Humanities. They will take one History course instead of History being part of the Humanities category and one Behavioral Sciences or Social Sciences course. The latter now

constitutes one area requirement instead of two. Again, these changes are intended to enhance transferability, while at the same time keeping Cultural Diversity and International Perspectives a key and unique aspect of the CU Denver core. There was a suggestion from the group that we require two courses in the Social Sciences and Behavioral Sciences, but because this deviates from the gtPathway core, it may affect transferability.

Below is a chart that compares the new recommended requirements to our current core requirements in relation to first-year and transfer students, including those who transfer in and those who transfer out.

First-year Students	Students Transferring into CU Denver
Current Core Curriculum: 34-40 credit hours including	Current Core Curriculum: Completed AA/AS=Core
courses in Composition, Math, Natural Sciences, Physical	is fulfilled. AA/AS in progress: 1:1 transcript review.
Sciences, Arts, Humanities, Social Sciences, International	The Cultural Diversity requirement represents an
Perspectives, and Cultural Diversity.	upper-division requirement beyond the 31 (possibly
Proposed Core Curriculum: 31 credit hours including	all lower-division) requirements.
courses in Multimodal Communication, Quantitative	Proposed Core Curriculum: Core accepts up to 31
Reasoning, Arts and Humanities, Behavioral and Social	gtPathways credit hours with streamlined
Sciences, History, Cultural Diversity, and International	pathways. There is an option to pursue certificate
Perspectives with an option for grouping them according	pathway, including/via an upper-division integrated
to thematic clusters and/or earning a certificate.	learning capstone course.

Students Transferring Out

Current Core Curriculum: Students must meet the core requirements of the receiving institution, possibly requiring additional coursework. **Proposed Core Curriculum:** Designed to maintain alignment to state-wide transfer agreements, reducing the need for additional coursework at the receiving public Colorado institution.

Conclusion

One of the strengths of this working group is that it included college/school and university advisors; faculty who teach core courses; program, unit, college/school, and central administrators; current and past CCOC chairs; and faculty who advise and teach within majors. While everyone had their own conceptions about current core problems and student success, each member worked with the group to understand how even the smallest changes might affect students, faculty, and staff. However, it is not clear to the group how the proposed changes, if implemented, will affect program viability and faculty and staff labor. We hope future implementation committees and task forces consider those factors carefully before making wholesale changes to the current core. Even simple changes to the core outcomes or

assessment tools will impact faculty, particularly IRC faculty, who teach a large portion of our core courses.

Because of time limitations, the group did not include detailed recommendations about how to implement or assess the new objectives, outcomes, and skills listed in this report, nor did we include the role first-year seminars might play in the new core. It was clear in our research that providing students with a first-year experience, whether it meets a core area requirement or introduces a thematic cluster, improves student success, retention, and degree completion. For example, first-year students who enrolled in a first-year seminar retained at a rate of 75% as compared to first-year students who did not enroll in a first-year seminar, who retained at a rate of 69%. First-time, First Gen students who enrolled in a first-year seminar retained at a rate of 74% as compared to first-time, First Gen who did not enroll and who retained at a rate of 69%. Transfer students who enrolled in a Transfer Year Seminar (TYS) retained at a rate of 84%, as compared to transfer students who did not enroll in a TYS, who retained at a rate of 78%. Therefore, in order to support our students and improve their retention rates, we recommend first-year, transfer-year, and capstone experiences, along with other high-impact practices, become an integral part of any new core curriculum.

Appendix

Summary of Group Work and Meetings

Our first meeting was the charge meeting on November 6, 2023 with Provost Nakuma, and we have met eight times since then. Our overarching plan was to spend December and January reviewing CU Denver and peer institution data on the purpose of the core and the values and principles that inform the structure and content of the core. We then spent all of February, March, and April crafting a shared list of core educational objectives, outcomes, and skills. During our fall meetings, we created multiple structures for the curriculum and assessed them according to accessibility and transferability, as well as our shared list of core objectives, outcomes, and skills. Finally, we synthesized those structures into a proposed hybrid model, which is both gtPathway-friendly and gives students the option to explore pressing social problems in interdisciplinary contexts.

Here is a summary of the work we have completed over the course of our meetings:

November 17, 2023

Presenters antwan Jefferson and Kim Regier (former and current CCOC chairs, respectively) discussed our existing core requirements and recent revisions. Current core curriculum requirements are located here: https://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements. Beth Myers presented the HLC accreditation core requirements, CDHE and GT pathway core requirements, prior learning/testing waivers for core requirements, and existing data we have available to aid in core reform.

November 27, 2023

Beth Myers presented the CU Boulder core revisions, and Michelle Comstock presented the UCCS core revisions. The group started brainstorming the values and principles they believed should inform the CU Denver core.

December 15, 2023

Dave Deffenbacher presented OIRE dashboards on DFW rates and degree completion rates, followed by small-group discussions on the following questions: What do the data suggest

about barriers students face in completing the core? What additional types of data do you need to understand in a more in-depth way the impact of the core on student performance and learning outcomes? How do the data correspond or not correspond with your own experiences of the core (as an advisor, staff member, faculty member, administrator, etc.)? Do the data support what you hear or experience anecdotally? What other problems do you see with core that are not represented by the data? Based on the data, what do you see as the key educational goals for the core for our population of students?

Over winter break, the group researched the core, including the revision process, for 2-3 universities considered "peer institutions." Some researched our official peer institutions and others chose comparable universities like the University of Northern Illinois, which has created a core of clustered courses around contemporary social problems and issues. The group noted the primary educational goals for the core at each institution they researched.

January 11, 2024

The group met with Ben Nelson, co-founder of Minerva University and spent most of the session learning how to research and develop core (durable) values, skills, and principles.

January 23, 2024

Jeremy Lingle presented the post-graduate skills currently in demand in Colorado industries, and the group reviewed the current CU Denver Core learning outcomes. In small groups members shared their findings on core curricula at peer institutions, with a particular emphasis on the underlying skills, habits of mind, and dispositions that inform the core.

February 9, 2024

At this meeting, the group began brainstorming the key skills, dispositions, and habits of mind they want students to learn from the core. The brainstorming document is rich with ideas that center on equipping students to navigate shifting career paths and civic and community contexts.

February 22, 2024

The group prioritized several of the above key skills and moved others to the periphery. By majority vote, they ranked developing academic skills and civic and socio-cultural skills as the two highest priorities for the core. They then began brainstorming a more specific set of skills

associated with academic success and civic and socio-cultural literacy. Here's that list of essential skills, again:

The core should support students in learning:

- Skills related to civic literacy and a critical understanding and appreciation of cultural and social histories and identities.
- Skills related to logical, ethical, quantitative, and scientific reasoning, as well as creative thinking.
- · How to use multiple forms of reasoning and analysis to address complex problems.
- How to communicate across a variety of modes to and for diverse audiences.
- How to evaluate multiple perspectives and collaborate effectively with others.

March 5, 2024

During this meeting members of the working group met in small groups to craft a core curriculum goal statement based on the two top priorities: developing academic skills and civic and socio-cultural skills. The facilitators and mentors then composed a core curriculum goal statement based on the group work. Below is a draft of that statement, which we then shared with the working group at the April 2 meeting.

The purpose of the CU Denver Core is to support student success in the university and beyond through the development of a wide range of academic skills and cultural knowledge. These essential skills include practicing and applying critical and creative thinking, quantitative reasoning, multimodal communication, and collaboration, etc, as well as developing and expanding social and cultural knowledge, which includes understanding cultural and social histories, differences, and identities. Employers agree these skills are critical for a successful career in a world of work marked by rapid change. The CU Denver Core, housed in an urban university with a diverse student body, also asks students to explore society's pressing problems (e.g., climate change, social justice, sustainability) from multiple perspectives. Such knowledge will empower students to advocate for and effect change in their workplaces, communities, states, and nations. Developing these essential skills prepares students to excel in their jobs, advance in their careers, participate effectively in their communities, and adapt to the evolving demands of the 21st century.

April 2, 2024

Our collective agenda at this meeting was to review the above core statement (a combination of small group statements meant to serve as a launching pad and not a final version) and explore different arrangements of the CU Denver Core, when reimagined for our students. We communicated a loose taxonomy for those arrangements: distribution requirements, courses clustered around contemporary social issues, courses sequenced for the development of essential skills during entire college career (Compass) model), and a mix of 2-3 of the above. For instance, while Minerva University emphasizes a set of essential outcomes across disciplines with hands-on learning, UCCS has developed a Compass curriculum that spans over 4 years, building upon prior knowledge. Most institutions implement a distribution model, with exposure to different disciplines. The group was not quite ready to agree on a core statement and preferred to talk about core arrangements. To guide that process, two of the group leaders created an approach that will shift the focus to outcomes at the April 18 meeting.

September 23, October 1, October 9, and October 23, 2024

During these four working group meetings, we reviewed the charge, the April progress report, the updated draft of objectives, and the general types of core structures: distributed, essential skills-based sequence, contemporary topic clusters, and a mixture of distributed and skills-based. We then worked in smaller groups to propose a new curriculum structure for CU Denver.

First, members chose two personas (one for a first-year student and one for a transfer student). The personas begin on p. 31 of the <u>Strategic Enrollment Plan.</u> They then constructed a core curricular structure (sequence of courses and/or requirements) that met their chosen personas' needs, based on the group's shared document of objectives, outcomes, and skills. We provided a sample chart with the UCCS Compass Core Curriculum mapped onto our working group's objectives, outcomes, and skills to scaffold the groups' work. They also considered these student-centered questions:

- b. Does it make transferring core credits easier or harder?
- c. How flexible is it for students?
- d. To what extent can students follow their interests?
- e. To what extent does it provide a sequence or scaffolding to support increasingly complex outcomes?
- f. To what extent does it support intersections and learning across core courses?

By the end of the Oct. 23 meeting, two different tentative structures were beginning to take shape: one that provided a hybrid approach to distribution and skills-based curriculum and

another that created a hybrid approach to topic clusters and a skills-based, sequenced set of outcomes across the whole university curriculum.

November 1, 2024

During our November 1 meeting the group learned more about the current core and transferability from CU Denver Student Success Office: Erika Larson, Assistant Vice Chancellor of Student Success and Samantha Kelly, Director of Transfer Initiatives. This discussion, along with the gtPathway state guidelines (gtPathways: https://cdhe.colorado.gov/students/attending-college/credit-transfer/guaranteed-transfer-gt-pathways-general-education) and their use in public universities across Colorado, deeply informed the group's movement toward a transfer-friendly core structure. The feedback Beth shared from her meeting with SGA—that students valued transferability and flexibility--confirmed this movement. Currently, our core requires one upper-division cultural diversity course beyond the 31 gtPathway-friendly requirements. We learned the 34-40 credits required to complete our current core can hinder students in technical degrees, particularly AAS degrees, from graduating in a timely manner, and we took this into consideration when ranking the models.

We mapped the emerging three core structures (skill development + current social issues/problems model; skill development + distribution model; and a hybrid model) onto a chart and asked members to rank them, based on the objectives and ease of transfer (https://olucdenver.sharepoint.com/:w:/r/sites/AcademicTransformationWorkingGroups-WG-1-ReimaginingtheCoreCurriculum/ layouts/15/Doc.aspx?sourcedoc=%7BA5106734-1CB8-4FAA-B74E-C4AEB9243FE2%7D&file=antwan_organizing.docx&action=default&mobileredirect=true).

The group consensus was to align with a gtPathways-friendly distribution model, and we began constructing a model structure, based on the gtPathways general education categories, as well as a distinctive topic-cluster option.

November 19, 2024

During our November 19 meeting, we discussed feedback from a UCCS advisor on the transferability of the UCCS Compass Curriculum. Erika Larson spoke with the advisor and summarized his feedback:

"While a great deal of effort and thought went into the development of the Compass Curriculum 12 years ago, there has been little to no evaluation of how this impacts time to degree especially with transfer students.... When students transfer in with 60 or more credits they only waive *part of the core* and some students are left taking *18 additional credits* but it all "depends." The advisor mentioned UCCS is gearing up to make some edits to the core, with the goal being closer aligned to state requirements.

We then shared our proposed model, which combines a gtPathways-friendly distribution structure with topics clusters and an optional capstone skills-based interdisciplinary course. The feedback we received on November 6, as well as with leadership, faculty, staff, and student governance groups, was integrated into our final set of objectives, outcomes, and skills and our proposed core structure.

https://olucdenver.sharepoint.com/:w:/s/AcademicTransformationWorkingGroups/EUYBm9dNyjlEt7FPi3vkJlwBakrhlp_UTugF2iDxRrUHMQ?e=j0nNNf

The group privileged a core curriculum that is flexible and workable for transfer students both IN and OUT. While gtPathways includes 31 credits of core

https://cdhe.colorado.gov/students/attending-college/credit-transfer/guaranteed-transfer-gt-pathways-general-education, the group learned HLC requires a minimum of 30 credits (whether through a traditional distributed curricula or through an embedded model), so we built the proposed model on *both* requirements. What follows is a detailed explanation of that new model, along with the shared list of objectives, outcomes, and skills.