General Education

Learning Outcome, Criteria, and Rationale (LOCR) Report
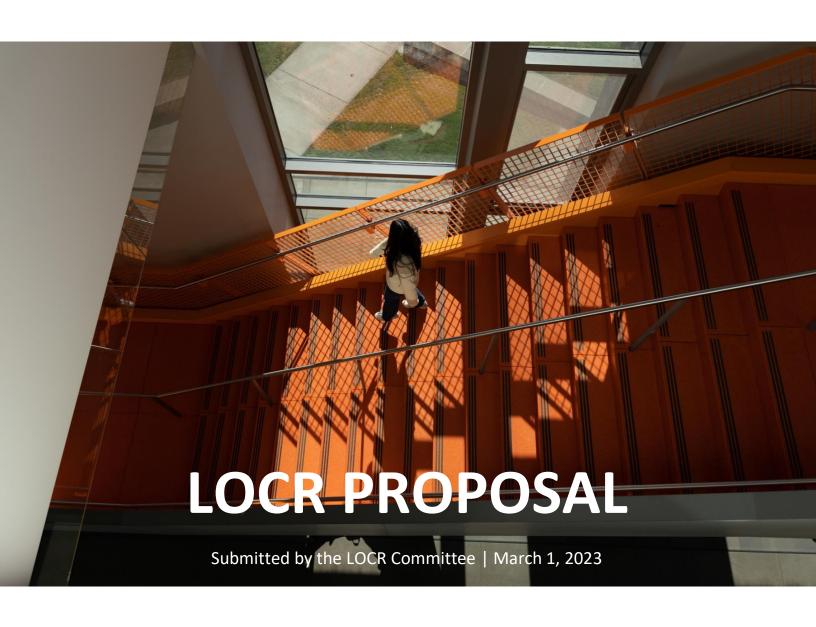
LOCR PROPOSAL

Submitted by the LOCR Committee | March 1, 2023

Oregon State University

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COMMITTEE

The Faculty Senate ratified the reformed Baccalaureate Core curriculum on October 13, 2022. Upon approval, a team of Oregon State University experts in assessment and measurement of student learning outcomes and course development was convened to lead the University through the process of creating new Learning Outcomes, Criteria, and Rationale (LOCRs).

Committee Chair

*JoAnne Bunnage, Assistant Vice Provost, Assessment and Accreditation

Committee Members | College/Unit

Funmi Amobi, Instructional Consultant and College Liaison, Center for Teaching and Learning

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*Selina Heppell, Former Faculty Senate President, Faculty Senate Executive Committee Liaison, Professor and Department Head, Fisheries, Wildlife, and Conservation Sciences

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Kristin Nagy Catz, Director of Assessment, Assessment and Accreditation

*(*Members of the Baccalaureate Core Reform Committee)*

INTRODUCTION

The final LOCR report is submitted on behalf of the Learning Outcome, Criteria, and Rationale (LOCR) Committee and the workgroups involved in creating new LOCRs. A draft version of this report was prepared and circulated February 3, 2023. Since then, feedback was collected through listening sessions and an online form, made available to the university community. The LOCR workgroups involved in creating each category LOCR sets were provided with the feedback and some groups made necessary updates within the parameters of their charge to their specific LOCRs. Some of the feedback fell outside of the parameters of creating LOCRs and landed in the implementational arena. The Implementation Core Committee will be responsible for assessing that information. Updates to the report are highlighted in yellow throughout the document. Each category in the newly approved curriculum required a set of LOCRs to guide faculty through the process of revising or creating new courses for inclusion in the new General Education (GE) curriculum. Further, new LOCRs were created in student-centered language to promote the translation of academia to skills and life beyond OSU. This student-centered framework remains critical to our new GE curriculum reform and considers best and high-impact practices, assessment of student learning, and equitable education practices. The LOCRs presented in this document reflect eight weeks of intensive faculty service and commitment to GE and several months of planning and preparing by the LOCR Committee.

HISTORY OF LEARNING OUTCOME DEVELOPMENT, ASSESSMENT, AND REFORM

Assessment and Accreditation

In 2010, the Baccalaureate Core (Bacc Core) Ad Hoc Review Committee articulated the need to create a clear, unified vision of general education assessment and communicate and visually represent this vision for students and outside stakeholders. This was in response to a previously recognized issue from the 2002 OSU Accreditation Team report, which identified a need to assess the Bacc Core's effectiveness. An upcoming 2010-11 OSU Accreditation self-report would need to include an ongoing plan for assessing general education at the institution. As a result, the Bacc Core Ad Hoc Review Committee called for implementing a continuous assessment and evaluation process.

An important first step in this process was the creation of distinct student learning outcomes for each Bacc Core category. This was integral for developing a faculty-led framework for sustaining and improving general education. The learning outcomes were created within content-specific workgroups made up of OSU faculty, with the intent that they would be assessed through a Faculty Senate-supported system of assessment. Specifically, this new process would require course faculty to follow two new guidelines for Bacc Core course assessment. First, all course syllabi required detailed assessment information, including posting the category student learning outcomes and informing students how they will be assessed. All learning outcomes were also made available online through the OSU website. Second, course faculty were required to regularly report student assessment results for review by the Bacc Core Committee. The plan was fully implemented in the 2010-11 academic year, and the first faculty reports were reviewed by the Bacc Core Committee in 2011-12.

After more than ten years of assessing courses, the Baccalaureate Core Committee notably began to recognize issues with the current LOCRs, as had many people throughout the university community. Specific issues included non-assessable and measurable outcomes, outcomes that were represented in multiple categories causing categories to merge, outcomes using inappropriate levels of Revised Blooms Taxonomy, a lack of definition for key terms, disconnects between the AACU VALUE rubrics, and the absence of assessing student outputs. These issues helped to frame the work our University is embarking upon today.

Strategic Plan

OSU's Strategic Plan 4.0[1] (SP 4.0) from 2019-2023 specifically called out reforming the Baccalaureate Core as an action item: "Provide distinctive curricula and support innovative pedagogy to advance our mission and vision." The reformed GE curriculum aligns with Goal II of the plan to provide "Transformative education that is accessible to all learners." All action items related to this tactic of SP 4.0 have been accomplished jointly by Academic Affairs and the Faculty Senate.

PURPOSE OF ASSESSMENT

Oregon State University assesses student learning and courses within our GE curriculum, currently known as the Baccalaureate Core (Bacc Core), to ensure that courses align with the intended student learning outcomes. The existing process has been one of monitoring what courses are allowed into the Bacc Core by analyzing the syllabus and ascertaining that the course aligns with the stated Bacc Core learning outcomes and criteria that define what belongs in each category. As we develop the new GE curriculum, the focus with the LOCR groups has been to create assessable learning outcomes for each category and to envision how students would best be able to demonstrate meeting those

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1 Oregon State University Strategic Plan 4.0: https://leadership.oregonstate.edu/sites/leadership.oregonstate.edu/files/sp4_final_4.pdf

learning outcomes in the criteria. The goal is to have well-defined learning outcomes and criteria for each general education category, providing a solid foundation for assessing student work on an ongoing basis.

Since the onset of the reform work, OSU has sought guidance at the national level from the American Association of Colleges and Universities (AAC&U) by participating in the Institute of General Education and Assessment and attending General Education, Pedagogy, and Assessment (GEPA) Annual Conferences. To inform the work of creating LOCRs, the Directors of Assessment and the Baccalaureate Core met with Dr. Kate McConnell, Vice President for Curricular and Pedagogical Innovation and the Executive Director of VALUE from AAC&U. They sought to understand how to connect the new LOCRs to AAC&U's VALUE rubrics as well as to glean best practices and advice from a national expert in assessment. Key advice from Dr. McConnell included: writing outcomes in student-centered language; having diverse faculty perspectives and disciplines when developing general education outcomes; measuring student learning through signature assignments; and adapting the VALUE rubrics to meet our institutional needs. Dr. McConnell invited the Directors to present the University's draft LOCRs at AAC&U's GEPA conference in February 2023 to receive feedback from national peers. Dr. McConnell also graciously agreed to be the featured speaker at the LOCR kick-off meeting on January 17, 2023.

LOCR COMMITTEE CHARGE

The LOCR Committee was formed and charged at the beginning of Fall 2022 in anticipation of the General Education curriculum passing the Faculty Senate. The charge came from the GE Implementation Chair of the Steering Committee, Alix Gitelman, Vice Provost of Academic Affairs, Senior Vice Provost, and the Core Team Chair, McKenzie Huber, Director of the Baccalaureate Core. The result of LOCR work will contribute to a fully implemented OSU GE model addressing best practices in higher education, equity and inclusion, transfer student needs, and informing the new OSU budget model.

The new general education will meet OSU curricular standards, be operational in all relevant OSU systems, and the campus community will understand how to navigate the new curriculum to best serve stakeholders.

The LOCR Committee was given the following charge:

1. Identify a timeline for the LOCR work to take place to meet our implementation deadline.
2. Recruit faculty participation for creating LOCRs.
3. Train and support faculty through the process.
4. Present a slate of LOCRs to the Faculty Senate for approval by the end of the 2022-23 academic year.

CURRICULAR FRAMEWORK AND TRANSFER MATTERS

OSU's General Education Model is broken into two main components: Foundational Core and OSU Signature Core. This is the same curriculum, with the same categorical and total credit counts approved by the Faculty Senate. However, it has been rearranged to translate the lower division requirements with our obligations to support transfer students.

- The Foundational Core is based upon the Oregon Core Transfer Map (CTM), which is a set of at least 8 courses (at least 30 credits) in categories outlined in the chart below. At least one required course must also meet the Cultural Literacy outcomes[2].
- Associates of Arts Oregon Transfer (AAOT) and the Associates of Science Oregon Transfer (ASOT) satisfies all lower division general education requirements for a bachelor's degree, including Difference, Power, and Oppression Foundations.

The workgroups developing LOCRs for the Foundational Core used the state's AAOT/ASOT/CTM outcomes[3] to inform their category learning outcomes.

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OREGON STATE UNIVERSITY GENERAL EDUCATION MODEL

FOUNDATIONAL CORE	
Writing Foundations (WR 121Z) (x*)	4 credits
Quantitative Literacy and Analysis (x*)	4 credits
Art and Humanities – General (x*)	3-4 credits
Art and Humanities – Global (x*)	3-4 credits
Communication, Media, and Society (Social Science) (x*)	3 credits
Social Science (x*)	3-4 credits
Scientific Inquiry and Analysis (Natural Science with lab) 2 courses (x*)	8 credits
Difference, Power, and Oppression: Foundations*	3-4 credits
OSU SIGNATURE CORE	
Transitions^	2 credits
Beyond OSU Career Integration	0 credits
Writing Elevation*	3 credits
Advanced Difference, Power, and Oppression	3-4 credits
Seeking Solutions	3-4 credits
Writing Intensive Curriculum	In major
Total credits	**42–48**

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x: Core Transfer Map requirements; *: Satisfied by AAOT
^: Lower Division: is intended for students who are in their first postsecondary education after high school. Upper Division: is intended for students who have attended other higher education institutions and are further along their educational journey.

Version History: LOCR Proposal and Report, V. 3, March 1, 2023 (DPO FAQs updated)

GUIDING PRINCIPLES

In preparation for supporting faculty through the LOCR development and acknowledging the short timeline, the LOCR Committee identified parameters in which the LOCR workgroups needed to work. The parameters resulting from the charge are to address best practices, promote equity and inclusion, support transfer student needs, and address operational issues identified by the Baccalaureate Core Committee.

- Do not let the budget model drive the LOCRs; the budget should support the mission of GE.
- Do not let the desire for an individual course drive the creation of LOCRs, courses can be adapted to fit the new LOCRs, and new courses can be created.
- The LOCRs for the foundational set of the GE must follow the state of Oregon legislative mandates, including the ability to map to the AAOT and CTM.
- Learning Outcomes are intended for students to articulate what they learned; therefore, language must be accessible to students.
- Leverage best practices, including the VALUE rubrics and other national association outcomes.
- No more than three LOCRs per category.
- Define terminology so a future faculty and assessment committee has a roadmap.

RECRUITING AND SELECTING LOCR WORKGROUPS

Ten workgroups were established to create LOCRs for each category in the GE curriculum. The LOCR workgroups were composed of a faculty Mentor and faculty Developers. Additionally, a liaison from the LOCR Committee was assigned to each workgroup to support the process and provide feedback. The committee developed position profiles and a rubric that was used to select applicants. An announcement of the implementation plan and recruitment for LOCR workgroup members was made through a university-wide email by the Senior Vice Provost, messages in OSU's daily newsletter, and during Faculty Senate meetings and monthly newsletters. Applications were available for three weeks through a short Qualtrics form; 108 faculty applied. Given the widespread interest and enthusiasm from faculty, and the desire to have diverse perspectives represented, workgroups have upwards of 10 Developers. All campus locations, faculty ranks, and colleges are represented throughout the workgroups. Many faculty represented by the Corvallis and Cascades Campus locations also provide instruction through Ecampus.

LOCR Workgroup Position Descriptions

LOCR Developers: During the workgroup meetings, Developers served as subject matter experts on crafting measurable student learning outcomes and criteria. Developers had experience and expertise in academic fields related to the chosen category. A deep understanding of general education was also desirable.

LOCR Mentors: During the workgroup meetings, Mentors facilitated the writing of measurable student learning outcomes and helped guide their designated category-specific workgroup through the development process. Mentors had experience with writing learning outcomes and doing assessments. Some knowledge and familiarity with the new General Education were also beneficial.

Assessment Liaisons: Liaisons served in a collaborative and supportive role to the Mentors and Developers. Assessment Liaisons ensured the Developers and Mentors had the tools, resources, and training needed to develop LOCRs. They were responsible for ensuring the final LOCRs fit within the parameters outlined and were completed by due dates. During the workgroup meetings, Liaisons were proactive with guidance and feedback rather than reactive to final proposals.

LOCR WORKGROUP MEMBERSHIP

Key:
College of: Agricultural Sciences (CAS); Business (COB); Earth, Ocean, and Atmospheric Sciences (CEOAS); Education (COED); Engineering (COE); Forestry (COF); Liberal Arts (CLA); Public Health and Human Sciences (CPHHS); Science (COS); Cascades*; LaGrande^: Career Development Center (CDC); Academic Affairs (AA); Counseling and Psychological Services (CAPS).

Liaisons:
Funmi Amobi: Arts and Humanities; Social Science; Seeking Solutions.
Heath Henry: Beyond OSU; Transitions; Difference, Power, and Oppression; Communication, Media, and Society.
Kristin Nagy Catz: Quantitative Literacy and Analysis; Scientific Inquiry and Analysis; Writing Foundations and Elevation; Seeking Solutions.

Writing: Foundations and Elevation		Quantitative Literacy and Analysis	
Kristy Kelly, Mentor	CLA	*Elaine Cozzi, Mentor*	COS
Andrea Allan	CEOAS	Aidas Jonas Banaitis	COS*
Dennis Bennett	CLA	Jon Chesbro	CLA
David L Blunck	COE	Sara Clark	COS
Lauren Dalton	COS	Lisa Ganio	COS
Maricruz Gomez	CLA	Kevin Lyons	COF
Deanna Lloyd	CAS	Pamela Sullivan	CEOAS
Arts and Humanities: General and Global		**Communication, Media, and Society**	
Kara Ritzheimer, Mentor	CLA	*Colin Hesse, Mentor*	CLA
Amanda Armington	CPHHS	Jon Louis Dorbolo	IT Development
Katherine Hubler	CLA	Brian Mills	COE
Cyndie McCarley	Ecampus	Elizabeth Root	CLA
Rebecca Olson	CLA	Dave Stemper	COF
Janet Rankin	CLA		
Nicole von Germeten	CLA		
Social Sciences		**Scientific Inquiry and Analysis**	
Rorie Solberg, Mentor	CLA	*Lori Kayes, Mentor*	COS
Tim Delbridge	CAS	Lesley Blair	COS
Demian Hommel	CEAOS	Marisa Chappell	CLA
David G Lewis	CLA	Marc Curtis	CAS
Camille Nelson	CLA	Julia Jones	CEAOS
Stacy Rosenberg	COF	Randall Milstein	COS
Michele Swift	COB	Ron Reuter	COF
Sarah Wright	COEd	Cassandra Siler	COS
		Kaplan Yalcin	CEOAS

Difference, Power, and Oppression: Foundations and Advanced		Beyond OSU Career Integration	
Ana Milena Ribero, Mentor	CLA	*Brandi Fuhrman, Mentor*	CDC
Ingrid Scheel, Mentor	COE	Meghan Brandow	CDC
Eliza Young Barstow	CLA	Tasha Galardi	CPHHS
Kelsey Emard	CEOAS	Brenna Gomez	CDC
Jonathan Garcia	CPHHS	Paul Hughes	CAS
Annie Hommel	CPHHS	Sai Sandeep	COE
Molly Kile	CPHHS	Elizabeth Simmons	CDC
Ricardo Mata-Gonzalez	CAS	Haley Traini	CAS
Kate Shay	COS	Jennifer Villalobos	COB
Luhui Whitebear	CLA		
Seeking Solutions		**Transitions**	
Selina Heppell, Mentor	CAS	*Erin Bird, Mentor*	AA
Pat Ball	COS*	*Steve Wuhs, Mentor*	AA; CLA
Geoffrey Barstow	CLA	Javier Calvo-Amodio	COE
Troy Hall	COF	Lauren Caruso	COB
Michael Harte	CEOAS	Penelope (Penny) Diebel	CAS^
Donald Heer	COE	Brian Doore	COEd
Louisa Hooven	CAS	Allison Evans	COS
Jonathan Kaplan	CLA	Bonnie Hemrick	CAPS
Kate Lajtha	CAS	Mark Hoffman	CPHHS
Megan MacDonald	CPHHS	Matthew Kennedy	CAS
Hannah Rempel	Library	Kate Kerish	INTO OSU
Jeremy Rose	COS	Tyler McFadden	CEOAS
Inara Scott	COB	Dianna McGinnis	Academic Advisor*

TIMELINE

The LOCR Committee was created in early fall 2022 in anticipation that the GE curriculum would be approved at the Faculty Senate Meeting on October 13, 2022. The timeline to develop LOCRs may seem fast paced; however, the University will launch the new GE curriculum in the summer of 2025. Approval of LOCRs will enable faculty to design or redevelop existing courses for inclusion into the new curriculum with ample time. Because Faculty Senate meeting agendas are full in May and June with the end of year business, the Faculty Senate Executive Committee requested the LOCR process make it through the senate by April 2023. Below is the overall timeline of the LOCR work, in addition to a high-level overview of the implementation timeline.

- October 13, 2022 – General Education Curriculum approved by the Faculty Senate

- October 26, 2022 – LOCR Applications Opened

- November 16, 2022 – LOCR Applications Closed

- December 8, 2022 – LOCR Participants were notified of selection

- December 14, 2022 – LOCR Mentor training

- January 11, 2023 – Kick-Off Meeting for all LOCR Developers and Mentors

- January 13, 2023 – February 1, 2022 – LOCR workgroups meet 2-3 times (approximately 2 hours each)

- January 17, 2023 – Seeking Solutions Listening Session

- February 2, 2023 – DEADLINE: All LOCR Workgroups submit Learning Outcomes, Criteria, and Rationale to their workgroup liaison

- February 6 & 7, 2023 – Zoom Listening Sessions open to all faculty and students

- February 17, 2023 – Workgroups meet to present final learning outcomes and criteria

- February 20, 2023 – Faculty Senate Executive Committee preview of LOCRs

- March 9, 2023 – Faculty Senate preview of LOCRs

- March 17, 2023 – Faculty Senate Special Meeting focusing on LOCRs

- April 13, 2023 – Faculty Senate vote on proposed LOCRs

Implementation Timeline

COMMUNICATION – LOCR UPDATES

Communication	Date	Method of Comm.	Audience
Implementation and LOCR Recruitment	October 26, 2022	Email C – Listservs; OSU Today	University
Implementation update, LOCR Recruitment	November 10, 2022	Faculty Senate Presentation and Newsletter	Faculty Senate
Implementation update, LOCR Selection Status	December 10, 2022	Faculty Senate Presentation and Newsletter	Faculty Senate
Implementation update, LOCR Workgroup announcements, Listening Session Announcements	January 12, 2022	Faculty Senate Presentation and Newsletter	Faculty Senate
Seeking Solutions Listening Session	Throughout December and early January	OSU Today, Email to General Education Liaison	University
LOCR Listening Sessions	February 6 & 7, 2023	Announcement at Faculty Senate, email to Faculty Senate and colleges, and OSU Today	University
Draft and Final Report Distribution	February 3, 2023 and February 28, 2023	Faculty Senate Executive Committee, Undergraduate Education Committee, LOCR Listening Session Registrants, Steering Committee, Core Committee, Bacc Core Committee, Pedagogical Support and Development Committee, Operations Committee, and Organizational Change Management Committee	Faculty Senate, Colleges, Listening Session Stakeholders, Implementation Committees.
Faculty Senate Special Session	March 17, 2023	Announcement at Faculty Senate, Faculty Senate Newsletter, OSU Today	Faculty Senate, University

LOCR WORKGROUP TRAINING AND SUPPORT

As noted throughout this document, the LOCR Workgroups engaged in a Kick-Off meeting and worked asynchronously during two or three meetings to produce their LOCRs. The Mentors had an extra meeting in December to set the foundation of the work and establish their roles. Guest speakers included Kate McConnell, AAC&U, and Erin Bird, Transfer Transitions Coordinator. Erin's presentation educated faculty on the AAOT, CTM, Common Course Numbering, and our obligation to create learning outcomes that meet the needs of our transfer students by closely aligning with the AAOT learning outcomes.

Resources to guide and support faculty were housed in Canvas, with individual modules prepared and tailored to each workgroup's needs. Modules included:

- Draft Criteria prepared by the LOCR Committee for workgroups to edit and fine-tune.
- Mission and Goals for the new GE.[4]
- GE Reform Report with specific page numbers each group would need to review.[5]
- AAOT outcomes specific to each group.
- AAC&U VALUE Rubrics specific to each group.[6]
- Professional organizations and supplemental artifacts the committee designated as necessary to their work.

LOCR DEFINITIONS

"LO" Learning Outcomes

Learning Outcomes are the measurable and specific statements about what we anticipate students will learn after participating in a class or classes. In this context, general education learning outcomes reflect what we intend students to understand once they have completed each of the thirteen different areas of the new GE curriculum. The learning outcomes need to be clearly stated, measurable in terms of what students will know or do after the learning experience, and applicable across all courses within each of the thirteen categories.

"C" Criteria

Curricular integrity flows from clear criteria. Criteria are elements that future versions of the Baccalaureate Core Committee (or renamed committee) will use to assess a course for approval and continuation in their respective category. Criteria can provide definitions for key terms, critical tests for meeting outcomes, operational specifications, and other ideas as relevant. Dispositive criteria allow lightweight, predictable policy positions by the General Education Committee, saving faculty time and providing an excellent student experience.

"R" Rationale

The Faculty Senate approved the rationale "R" when ratifying the curriculum outlined in the report. The rationale helped guide the LOCR workgroups learning outcome development in that it served as the foundation for the category's existence. Changes to the ratified core of the rationale were not permitted.

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4 Mission and Goals: https://apa.oregonstate.edu/general-education/general-education-implementation/curricular-overview
5 Reform Report: https://oregonstate.app.box.com/file/966135112882?s=d85hoku9h5yxm5nn69emoctf33x2inn8
6 AAC&U Value Rubrics: https://www.aacu.org/initiatives/value-initiative/value-rubrics

LEARNING OUTCOMES AT A GLANCE*

Writing Foundations Learning Outcomes

1. Write in varied styles with attention to audience, purpose, and genre, incorporating how language use relates to rhetorical situations.
2. Create texts that synthesize multiple viewpoints around a central idea supported with evidence.
3. Evaluate information critically using sources and foundational citation skills.

Writing Elevation Learning Outcomes

1. Construct rhetorically-informed texts that adapt to new writing situations, audiences, and relevant knowledge domains.
2. Synthesize diverse perspectives in complex conversations using critical analysis and genre-appropriate writing styles and conventions.
3. Integrate critically-evaluated sources in knowledge-domain-specific documents and arguments.

Arts and Humanities: General Learning Outcomes

1. Describe genres, forms, perspectives, events and/or ideas that have shaped and recorded the human experience.
2. Analyze examples of human expression and/or human perspectives in changing cultural and/or historical contexts.
3. Employ humanistic, theoretical, and/or philosophical methods to explore the human experience.

Arts and Humanities: Global Learning Outcomes

1. Describe genres, forms, perspectives, events and/or ideas that have shaped and recorded the human experience.
2. Analyze the social and/or cultural impact of inequitable systems in relation to the global movement of peoples, ideas, objects, artistic forms, and/or technologies.
3. Employ humanistic, theoretical, and/or philosophical methods to explore the human experience.

Quantitative Literacy and Analysis Learning Outcomes

1. Identify relevant quantitative variables and their relationship(s) in a problem.
2. Solve quantitative problems using appropriate mathematical tools.
3. Demonstrate reasonableness of a solution and describe limitations of method.

Communication, Media, and Society Learning Outcomes

1. Identify communication and media processes as they relate to social phenomena.
2. Describe different forms of communication and media and the degree to which they meet the needs of diverse audiences and contexts.
3. Apply communication theory to the development and delivery of oral communication products.

Social Science Learning Outcomes

1. Explain the informal and formal structures and processes of Institutions and human behavior.
2. Describe how quantitative and qualitative data are used to explain human behavior.
3. Characterize your individual role in the structures, processes, or institutions of society.

Scientific Inquiry and Analysis

1. Utilize scientific language, concepts, hypotheses, theories, and laws of basic natural sciences.
2. Apply the cyclical process of science and think critically by constructing consistent explanations and drawing conclusions based on empirical evidence and current scientific understanding.
3. Articulate the consequences and implications of science for society, daily life, and decision-making.

DPO Foundations Learning Outcomes

1. Explain how ascribed differences are socially constructed, change over time, and impact our and others' lived experiences.
2. Articulate– using historical and contemporary examples – how ascribed differences, combined with inequitable distribution of power across cultural, economic, social, and/or political institutions, result in racism and intersect with other forms of systemic oppression.
3. Describe how assets and resilience demonstrated by members of systematically marginalized communities and cultures play a role in dismantling racism and other systems of oppression.

DPO Advanced Learning Outcomes

1. Analyze how systemic power operates through the ascription of difference to reproduce structural inequities and how ==they== and others in t==heir field of study== are positioned in relationship to those systems.
2. Demonstrate, by using social justice theories, how historic constructions of racism and other forms of systemic oppression result in intersecting inequities – crossroads of oppression – experienced in current times (last ==10== years).
3. Compare approaches for dismantling racism and other systems of oppression ==within their field of study with== the goal of advancing cultural, economic, social, and/or political equity.

Transitions Lower Division Learning Outcomes

1. Construct goals and individualized strategies for personal well-being, academic success, and professional development.
2. ==Practice community-building approaches that allow one to engage in society.==
3. Identify institutional resources and tools necessary for student success and well-being.
4. Reflect on how their plans connect to OSU's General Education and the institutional mission.

Transitions Upper Division Learning Outcomes

1. Create and implement goals and individualized strategies for personal well-being, academic success, and professional development.
2. ==Evaluate community-building approaches that allow one to engage in society.==
3. Identify institutional resources and tools necessary for student success and well-being.
4. Reflect on how their plans connect to OSU's General Education and the institutional mission.

Beyond OSU I: Prepare Learning Outcomes

1. Illustrate how OSU and related experiences connect to career readiness and career advancement skills.
2. Apply life-long career development concepts* through the creation of career relevant artifacts.

Beyond OSU II: Engage Learning Outcomes

1. ==Apply career development concepts to relevant artifacts* from engagement in a career related experience or activity.==

Seeking Solutions Learning Outcomes

1. Analyze a complex, multi-faceted issue that is resistant to a simple solution, including the scope of the problem, identifying and defining its causes, and impacts on a diverse variety of stakeholders.
2. Evaluate the consequences of different approaches or solutions to a complex, multi-faceted issue.
3. Develop a plan or product to communicate approaches to addressing the problem[s] to one or more identified stakeholder group or other "real world" audience.
4. ==Demonstrate skills that enable effective collaboration through interdisciplinary teamwork in one or more of these learning outcomes==.

Learning Outcomes at a Glance do not include context, definitions, FAQs, criteria, or rationale. Please refer to the remainder of the LOCR Proposal for this information.

PROPOSED LOCRs

WRITING: FOUNDATIONS AND ELEVATION

Writing Foundations Rationale

Writing Foundations serves as an introduction to college-level writing and key rhetorical concepts. Category outcomes build from guidance from OWEAC, AAOT, and other best practices from writing experts at the state and national levels to ensure alignment with transfer partners.

Writing Foundations Learning Outcomes

Students in Writing Foundations will:

1. Write in varied styles with attention to audience, purpose, and genre, incorporating how language use relates to rhetorical situations.
2. Create texts that synthesize multiple viewpoints around a central idea supported with evidence.
3. Evaluate information critically using sources and foundational citation skills.

Writing Foundations Criteria

Courses in Writing Foundations will:

1. Be WR 121Z. This is the only approved course for Writing Foundations, ratified by the Faculty Senate.
2. Be 4 credits (no more, no less).
3. Be capped at 22 students per section to allow for individualized, timely, and recursive feedback from instructor.*
4. Focus on the writing process, invention strategies, drafting and revision techniques, and peer review.
5. Require frequent student practice in informal writing exercises and formal writing assignments that receive direct evaluation from the instructor.
6. Develop increasingly sophisticated and efficient writing strategies with emphasis on genre.
7. Define "rhetorical situations" (Learning Outcome #1) as the interconnectedness of audience, purpose, and context that drives written conventions; students should learn how rhetorical situations influence genre, style, and writing choices.
8. Use "critically" (Learning Outcome #3) as it refers to evaluation of information that determines credibility; considers power, privilege, identity, and diverse ways of knowing; recognizes misinformation; etc.

*GTAs can be used as instructors with a course cap of 20 and adequate training with appropriate pay prior to instruction.

Writing Elevation Rationale

Writing Elevation provides students with quality intermediate-level writing instruction, practice, and feedback between the Writing Foundations and Writing Intensive Curriculum (WIC) categories. The courses in this category will also strengthen the connections between writing and students' chosen field of study. The goal of this requirement is to elevate students' ability to write within a range of contexts, while also preparing them for their chosen academic discipline and WIC courses.

Writing Elevation Learning Outcomes
Students in Writing Elevation will:

1. Construct rhetorically-informed texts that adapt to new writing situations, audiences, and relevant knowledge domains.
2. Synthesize diverse perspectives in complex conversations using critical analysis and genre-appropriate writing styles and conventions.
3. Integrate critically-evaluated sources in knowledge-domain-specific documents and arguments.

Writing Elevation Criteria
Courses in Writing Elevation will:

1. Be 3 credits[7], as ratified by the Faculty senate.
2. Include quality writing instruction, practice, and feedback
   a. Course caps at 22 students per section to allow for individualized, timely, and recursive feedback from instructor.
3. Be at the upper division[7] level.
   a. Upper-division rationale: as dictated by the AAOT/CTM and also because this category was intended to strengthen the connection between intermediate writing and a student's major. Offering courses at the upper division allows students more time to solidify their major and reduces the circumstances in which a student would be required to take an additional Writing Elevation course if they change majors.
4. Map directly to a knowledge domain* that links to appropriate WIC course(s). A course may apply to more than one knowledge domain.
   a. WE courses must be WR-designated and taught by faculty with expertise in teaching general education, knowledge-domain-level writing courses that transfer into multiple disciplines.
5. Not create unreasonable barriers for students seeking to fulfill these categories, including prerequisites, class-level restrictions, and college and major restrictions.
6. Can have a pre-req of WR 121Z only, no other pre-reqs are permitted.
7. Provide concepts and guidelines for determining effective communication within a specific area or knowledge domain*, including conventions of that field.
8. Require frequent student practice in informal writing exercises and formal writing assignments that receive direct evaluation from the instructor.
9. Focus on the writing process, invention strategies, drafting, peer review, and revision techniques in a specific knowledge domain.
10. Include instruction on knowledge-domain-specific citation tools and information sources.

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7 *This category is a fixed 3 credits, as are some other categories in the curriculum. We will allow an exception for a 4-credit course in this specific category if, and only if, a specific course is forced to move to 4 credits (or in some cases 5 credits in other categories) when Common Course Numbering dictates. This will mean that inclusion of all other courses in the category must remain at 3 credits if they want to be included in this category. Similarly, for categories that specify upper-division courses only, we will make an exception to allow a lower division course, if and only if, CCN dictates the course is offered at a lower division level.*

Definitions

Knowledge domain: refers to broader areas of study and research (e.g., natural sciences, humanities, etc.), as each Writing Elevated course will feed into a diverse array of discipline-specific WIC course(s).

<mark>**Critically:** refers to evaluation of information that determines credibility; considers power, privilege, identity, and diverse ways of knowing; recognizes misinformation; etc.</mark>

<mark>**WR Foundations and Elevation Process**</mark>

In the sub-point under the third criterion, we amended the approved language to create less potential confusion. The committee thought the original language suggested that Writing Elevation courses would help students solidify their major, rather than being designed for students to take once they had already selected their major as the category actually intends. The original language appears below for reference:

- "Upper-division rationale: as dictated by the AAOT/CTM and also because this category was intended to strengthen the connection between intermediate writing and a student's major. Courses offered at the upper-division level help to ensure that a student has solidified their major selection and reduces the circumstances in which a student would be required to take an additional Writing Elevation course if they change majors."
- We omitted the approved language on how WE courses relate to fields of study and replaced/elaborated upon it in the 4th criterion regarding knowledge domains. This was to further clarify that WE courses connect to broader areas of study, which then apply to discipline-specific WIC courses. The original language appears below:
    - "Students will take one course in this category at the upper division level related to their major or related field of study. A Writing Elevation course does not need to be created for each major, rather, WE courses can be shared across schools, majors, and college."
- <mark>Notes on Revisions (2.16.22):</mark> We changed the highlighted text to remove multiple verbs based on feedback from AAC&U, and added the same criteria from Writing Foundations about how the critical evaluation of sources connects to power, privilege, and the recognition of misinformation.

ARTS AND HUMANITIES: GENERAL AND GLOBAL

Arts and Humanities: General and Global Rationale

Arts and Humanities courses will promote the development of critical thinking and inquiry through the study of the arts and humanities. Students will reflect on the relationship between the course content and their lived experience. Creative expression is a fundamental human activity that results in the production of objects, environments, and experiences that engage the senses, emotion, and/or intellect. The humanities grapple with a range of human experiences through time and across cultures. The arts* and humanities* include knowledge of history, philosophical traditions, major religions, diverse cultural legacies, performing arts, literature, film, the visual arts, and music.

Arts and Humanities: General Learning Outcomes
Students in Arts and Humanities will:

1. Describe genres, forms, perspectives, events and/or ideas that have shaped and recorded the human experience.
2. Analyze examples of human expression* and/or human perspectives in changing cultural and/or historical contexts.*
3. Employ humanistic, theoretical, and/or philosophical methods to explore the human experience.

Arts and Humanities: General Criteria
Courses in Arts and Humanities will:

1. Be at the 100 or 200 level.
2. Range from 3-4 credits.
3. Introduce the fundamental ideas, practices, and conventions of the arts and humanities discipline*.
4. Provide students with opportunities to apply the fundamental ideas, practices, and conventions of the discipline by producing a creative or interpretive work. Instructors will provide guidance, formative feedback* on small-stakes assignments, and summative feedback* on larger projects. In order that instructors can provide guidance and appropriate feedback, classes should be capped at 40. Classes that exceed this cap require the support of a Teaching Assistant.
5. Emphasize critical thinking*. Critical thinking entails asking questions, defining problems, examining evidence and sources, analyzing assumptions and biases, contending with complexity, considering other interpretations, and tolerating ambiguity.
6. Place the subject matter in a historical and/or cultural context.
7. Encourage students to make connections with their lived experience.
8. Do one or more of the following:
    a. Compare/contrast attitudes and values of specific historical periods and world cultures.
    b. Examine the origins and influences of ethical or aesthetic traditions.
    c. Explore the conventions and techniques of genres of artistic expression.

Arts and Humanities: Global Learning Outcomes

Students in Arts and Humanities: Global will:

1. Describe genres, forms, perspectives, events and/or ideas that have shaped and recorded the global human experience.
2. Analyze the social and/or cultural impact of inequitable systems in relation to the global movement of peoples, ideas, objects, artistic forms, and/or technologies.
3. Employ humanistic, theoretical, and/or philosophical methods to explore the human experience.

Arts and Humanities: Global Criteria

Courses in Arts and Humanities: Global will:

1. Be at the 100 or 200 level.
2. Range from 3-4 credits.
3. Introduce the fundamental ideas, practices, and conventions of the arts or humanities discipline.*
4. Provide students with opportunities to apply the fundamental ideas, practices, and conventions of the discipline by producing a creative or interpretive work. Instructors will provide guidance, formative feedback on small-stakes assignments, and summative feedback on larger projects. In order that instructors can provide guidance and appropriate feedback, classes should be capped at 40[8]. Classes that exceed this cap require the support of a Teaching Assistant.
5. Emphasize critical thinking. Critical thinking entails asking questions, defining problems, examining evidence and sources, analyzing assumptions and biases, contending with complexity, considering other interpretations, and tolerating ambiguity.
6. Place the subject matter in a historical and/or cultural context.
7. Encourage students to make connections with their lived experience.
8. Do one or more of the following:
   a. Compare/contrast attitudes and values of specific historical periods and world cultures.
   b. Examine the origins and influences of ethical or aesthetic traditions.
   c. Explore the conventions and techniques of genres of artistic expression.

Global Emphasis specific criteria
9. Examine connections between multiple geographic regions in a way that focuses on the world outside the United States and emphasizes regions beyond Europe. This may include demonstrating connections between a primary region and its surroundings, or may include a focus on multiple geographic regions. No more than one week or equivalent be spent on a US stand-alone topic.
10. Explain and connect multiple cultures historically and/or in contemporary contexts.
11. Emphasize multiple perspectives, including those of non-dominant* groups outside the US and Europe.

Definitions

Arts: Creative expression is a fundamental human activity that results in the production of objects, environments, and experiences that engage the senses, emotion, and/or intellect. The arts include music, theater, dance, film, design, visual and installation arts, media and digital arts, literary arts, and experimental forms.

Humanities: The humanities entail the study of the human world and society from a critical perspective. The humanities include ethnic studies, gender and women's studies, philosophy, multicultural studies, literature, religion, history, languages, art history, and classics.

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8 Does Class Size Matter?: https://journals3.oregondigital.org/nwelearn/article/view/5608/7333

Discipline: A subdivision of knowledge that is taught and researched at the college and university level.

Critical Thinking: Critical thinking entails asking questions, defining problems, examining evidence and sources, analyzing assumptions and biases, contending with complexity, considering other interpretations, and tolerating ambiguity.

Forms: Shape and structure, composition, configuration, technique, and/or media. Some examples include: a sonnet, a sculpture, a musical arrangement.

Arts and Humanities Global: Examines connections between multiple geographic regions in a way that focuses on the world outside the United States and emphasizes regions beyond Europe. This may include demonstrating connections between a primary region and its surroundings, or may include a focus on multiple geographic regions. No more than one week or equivalent be spent on a US stand-alone topic."

Non-dominant groups: A group within a society without the power, privilege and social status that controls and defines societal resources and social, political and economic systems and norms.

Context: the circumstances that form the setting for an event, statement, or idea, and in terms of which it can be fully understood and assessed.

Formative feedback: Activities are typically ungraded or low-stakes opportunities to promote and measure student knowledge and skills. Examples of formative feedback techniques include many interactive classroom activities, homework and surveys.

Summative feedback: Typically given toward the end of a course, provides an evaluation of how much a student and the class has learned and is often connected to a grade. Examples of summative feedback techniques include exams, final projects, and research reports.

Human Expression: Any medium humans use to make meaning.

Process

The list below reflects our discussion of the feedback.
- Had a discussion about explore versus explain/discuss (a suggestion that emerged from the listening sessions). We debated the merits of "examine" versus "explore" versus "discuss." We had a discussion about lower/higher level learning outcomes from Blooms. We debated whether "explore" was measurable. We determined that the important verb in LO 3 is "employ" (which is measurable) so we opted for "explore" as the second verb in LO3.
- Breakout room question about LO 2. Added **add/or** and **human** in front of perspectives to provide more clarity.
- Discussed the suggestion to add **and/or** to the last criteria regarding aesthetic traditions and determined that courses should address both. We determined that faculty trained in the history and origins of aesthetic and ethics should be able to provide content regarding origins and influences. We therefore maintained it as "and."
- In response to feedback, we debated changing LO1 so that "recorded" was in present tense. We decided to maintain it as is because its current form (as past tense) indicates that the past continues to shape the present and individual experiences. The committee believes that the present-tense form of "record" does not reflect, as well, the intent of this LO.
  - Addendum: The Assessment and Accreditation team reviewed the Arts & Humanities learning outcomes and adopted the past-tense form of both verbs so that it now reads: Describe genres, forms, perspectives, events and/or ideas that have shaped and recorded the human experience.
- One participant suggested adding "forms" or "methods" to LO 1. We decided to incorporate "**forms**" but not "methods" since LO 3 includes "methods." **We added a definition of "forms" to the glossary.**
- Added key terms also to Global Learning Outcomes 1 and 3 (to mirror changes to the general LOs).

- Deliberated class size. Determined class size is appropriate for providing formative and summative feedback, providing students with experiential learning opportunities, and ensuring student success. We consulted data provided by a committee member regarding class size and student success.
- Modified learning criteria three so that the language was more specific to the arts and humanities disciplines.
- Modified criteria four to add "of the discipline."

Arts and Humanities FAQs

Question: Why do you have class size requirements?

> *Answer: Deliberated class size. Believed class size is appropriate for providing formative and summative feedback, providing students with experiential learning opportunities, and ensuring student success. A committee member provided data demonstrating that smaller class size ensure student success.*

Question: How do we make sure that students have experiential learning in the category?

> *Answer: We determined that criteria item four addresses experiential learning. Our rationale and criteria also require reflection, which we believe incorporates experiential learning.*

Quantitative Literacy and Analysis Rationale

Quantitative literacy and analysis skills are vital in our information-rich world. This category provides students with options among algebra, calculus, and statistics courses allowing them to develop critical thinking skills with essential mathematical concepts and models. This category is not intended to include domains that may be mathematics adjacent (e.g., discipline-based statistics classes).

Quantitative Literacy and Analysis Learning Outcomes

Students in Quantitative Literacy and Analysis will:

1. Identify relevant quantitative variables and their relationship(s) in a problem.
2. Solve quantitative problems using appropriate mathematical tools.
3. Demonstrate reasonableness of a solution and describe limitations of method.

Quantitative Literacy and Analysis Criteria

Courses in Quantitative Literacy and Analysis will:

1. Center on mathematical concepts and mathematical reasoning. This category is not intended for discipline-specific mathematics or statistics courses (e.g. engineering or business statistics), which focus more heavily on applications.
2. Emphasize mathematical or statistical models and problem-solving strategies.
3. Be 4 credits.[9]
4. Be at the 100 or 200 level.
5. Be accessible to students independent of College or Major.
6. Contain assessment items requiring students to show their work and explain their reasoning.
7. Require students to use mathematical terminology, notation and symbolic processes appropriately and correctly.
8. Require students to use visual representations, such as charts, graphs, and tables, to both communicate and extract information accurately.
9. Require students to use mathematical tools to complete estimations and calculations. Mathematical tools include technology, algebra, and arithmetic.

Process

Our process of establishing QLA learning outcomes and criteria began with a broad discussion of a definition of quantitative literacy and what we expect from a quantitatively literate individual. We settled on four broad skills essential for quantitative literacy: identify quantitative structure of a situation, estimate/calculate, validate, and communicate.

Our next step was to capture these skills in three assessable learning outcomes. We felt that "identifying quantitative structure" can be interpreted as a more advanced skill and does not accurately capture what we expect

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9 *An exception for a 5-credit course in this specific category is permissible if, and only if, a specific course is forced to move to 5 credits when Common Course Numbering dictates. This will mean that inclusion of all other courses in the category must remain at 4 credits if they want to be in this category.*

from students in a lower division QL course. We agreed on "Identify quantitative variables and their relationship(s) in a problem", which better captures the quantitative structure a student should identify at this level.

We moved on to "estimate/calculate". After discussion, we decided that students should be able to solve problems, and, most importantly, to do so using mathematical tools. This led to the second learning outcome. The word "tools" is meant to encompass several different techniques for solving problems, and we decided to elaborate on this in the criteria.

Our next goal was to capture the process of validation of a solution. Given that the word "validate" has a specific meaning in statistics, we settled on a more student-friendly expression: "demonstrate reasonableness" of a solution. The group also felt students with quantitative literacy should be able to recognize limitations of a method. This led to the third learning outcome.

During our discussions, we considered folding "communication" into one of our three learning outcomes but felt that students *are* communicating (both orally or in writing) when identifying relationships between variables, solving problems, and demonstrating reasonableness of a solution. We decided to elaborate on how communication is captured in the learning outcomes in the criteria. Indeed, some of the criteria more specifically mention communication.

After establishing the learning outcomes, we began our discussion of criteria. Several of the criteria were already ratified by the Faculty Senate prior to our group's meeting, such as: category is not intended for discipline-specific mathematics or statistics courses, must be 4 credits, must be lower division. We decided to emphasize that courses in this category should "center" on mathematical concepts and mathematical reasoning and should not be "mathematics adjacent". (See Rationale). In addition, we decided to specify the importance of assessment items in a course which allow an instructor to accurately gauge a student's understanding of quantitative concepts. Finally, we wanted to elaborate on requirements of students taking a course in this category: use mathematical terminology and notation correctly, use visual representations (charts, graphs, tables) effectively, and use mathematical tools to perform estimations and calculations.

Communication, Media, and Society Rationale

This category develops skills related to communication competency from a social science perspective. In this category, the focus of communication is on ways in which verbal and nonverbal messages are crafted and the potential impact these messages could have, media are the different tools (or channels) used to convey those messages, and society refers to the social context of message creation and reception. The knowledge, skills, and abilities gained from this category are integral to best practices in higher learning and are one of the most sought-after skills by employers. The combination of communication and media provides relevance to applications within emerging digital technology in order to use technology effectively, rather than be used by it. To demonstrate communication competence, students will develop and deliver communication products reviewed by both the instructor and co-learners.

Communication, Media, and Society Learning Outcomes
Students in Communication, Media, and Society will:

1. Identify communication and media processes as they relate to social phenomena.
2. Describe different forms of communication and media and the degree to which they meet the needs of diverse audiences and contexts.
3. Apply communication theory to the development and delivery of oral communication products.

Communication, Media, and Society Criteria
Courses in Communication, Media, and Society will:

1. Be at the 100 or 200 level.
2. Be 3 credits.[10]
3. Be accessible to both lower and upper-division students.
4. Cap course size: 30 max students per section, except in a recitation format, where the lecture portion is uncapped, with 20 max students per recitation section of the course.

   Note: If used, recitation sections must be worth at least 2 contact hours. Course size is limited so that there is time for thoughtful, thorough, and consistent feedback from instructor and peers on student development and delivery of communication products. Needs to be time for the student delivery of communication products themselves.

5. Use Oral Communication Products: Students are required to develop and deliver a minimum of 2 formal oral communication products.
   a. On Campus learners: At least one delivered to a synchronous audience that includes the instructor and co-learners (on-site and/or remote). By definition, the term synchronous means that the oral communication product cannot be pre-recorded.
   b. Ecampus learners: At least one delivered to a synchronous audience that includes co-learners (on-site and/or remote). By definition, the term synchronous means that the oral communication product cannot be pre-recorded.

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10 *This category is a fixed 3 credits, as are some other categories in the curriculum. An exception for a 4-credit course in this specific category is permissible if, and only if, a specific course is forced to move to 4 credits when Common Course Numbering dictates. This will mean that inclusion of all other courses in the category must remain at 3 credits if they want to be in this category. Similarly, for categories that specify upper-division courses only, we will make an exception to allow a lower division course, if and only if, CCN dictates the course is offered a lower division level.*

6. Include theoretical foundations of communication to guide students in the development and delivery of communication products.
7. Include exploration of societal phenomena (e.g. trends, behaviors, demographics, emerging technologies, etc.) as they relate to communication and media processes and uses.
8. Incorporate Instructor Feedback: Formal and formative feedback given to the development and delivery of communication products.

    Note: Instructors should be giving timely feedback multiple times to students - both formative and summative will be provided.

9. Incorporate Peer Feedback: Courses should incorporate opportunities for students to critique and provide feedback on classmate works.

    Note: Minimum of one time per term of peer feedback.

Definitions

Communication: Participating in shared meaning-making with others and its potential impact.

Media: The channels by which communication is developed and disseminated, typically involving interplay with technology.

Society: The context in which communication is occurring - organized and structured communities, along with the societal phenomena that occurs within those contexts.

Communication, Media, and Society FAQs

Question: Why is there a distinction for the Use Oral Communication Products criteria between Ecampus and on Campus learners in the criteria?

> *Answer: The distinction allows for the distance learners to continue to have synchronous assignments in the course (as currently delivered in COMM 111, for example), while understanding that the schedules of distance learners and the schedules of instructors might be so disparate that the requirement would make the learning environment overly difficult for everyone.*

SOCIAL SCIENCE

Social Science Rationale

Social Sciences includes courses that concern people and institutions and how they relate with one another. This includes studies of individuals, families, communities, markets, movements, and political structures from the perspective of contemporary social science.

Social Science Learning Outcomes

Students in Social Science will:

1. Explain the informal and formal structures and processes of Institutions and human behavior.
2. Describe how quantitative and qualitative data are used to explain human behavior.
3. Characterize your individual role in the structures, processes, or institutions of society.

Social Science Criteria

Courses in Social Science will:

1. Be at the 100 or 200 level.
2. Range from 3-4 credits.
3. Be accessible to both lower and upper-division students.
4. Be introductory courses to a general field or subfield of social science.
5. Require more than explaining the institution* for LO #1. The structures or processes must be placed in the context of an institution and human behavior. This outcome recognizes that social science studies the interaction of people with institutions.
6. Focus on the methodology used in the social sciences that allow us to explain and predict human behavior for LO #2, as such students need to understand how we collect and use data. Therefore, we expect courses to use appropriate social scientific methods* to collect data and/or analyze or explain social relations and human behavior. For this outcome, we expect courses to at least introduce the concepts of correlation, two variables moving together, and causation, a change in one variable causing the change in another variable.
7. Focus on the students as a participant in the structures, processes, or institutions for LO #3, as opposed to LO #1 which focuses on overall human behavior and its interactions with structures, processes, and institutions. This outcome serves the University's core values of social responsibility, integrity, and accountability.

Definitions

Structures and Processes: Defined broadly to include rules, norms, procedures, practices, policies, laws, and/or values.

Institutions: Defined broadly to include organizations and groups founded for religious, social, governmental, or other similar purposes or established.

Characterize: Defined as describing the distinctive nature.

Examples of social science methods used to analyze or explain human behavior: Hypothesis testing; Causal inferences; Inductive and deductive reasoning/logic; Ethnographic studies; Modeling.

Examples of appropriate data for use in social scientific studies includes: Interviews; Observations; Surveys; Experiments.

SCIENTIFIC INQUIRY AND ANALYSIS

Scientific Inquiry and Analysis Rationale

Scientific Inquiry and Analysis includes two natural science courses, each with a lab. These courses will engage students in the high-impact practice of scientific inquiry and explore generation and uses for scientific evidence. These courses involve developing knowledge of basic scientific concepts, how science works, collaborative group problem solving and science communication to a general audience. Labs accompanying these courses will engage students in the process of science from observation and hypothesis testing through data collection and analysis culminating in communication of results.

Scientific Inquiry and Analysis courses must be taken from two different designators consistent with policy. Each course is worth 4 credits but if majors or programs have 5 credit lab science courses already embedded in their curriculum, they may use those 5 credit courses to fulfill the lab science requirement in the GE.

* This category is a fixed 8 credits (4 credits per course).

Scientific Inquiry and Analysis Learning Outcomes
Students in Scientific Inquiry and Analysis will:

1. Utilize scientific language, concepts, hypotheses, theories, and laws of basic natural sciences.
2. Apply the cyclical process of science and think critically by constructing consistent explanations and drawing conclusions based on empirical evidence and current scientific understanding.
3. Articulate the consequences and implications of science for society, daily life, and decision-making.

Scientific Inquiry and Analysis Criteria
Courses in Scientific Inquiry and Analysis will:

1. Be 4 credits[11] and lower division.
   a. Separate lab and lecture paired courses may be combined to equal 4 credits to satisfy this requirement.
2. Not create unreasonable barriers for students seeking to fulfill this category, including prerequisites, class-level restrictions, and college and major restrictions.
3. Be centered on fundamental scientific concepts, laws, and theories that broadly characterize basic (rather than applied) natural science. Basic science is defined as science seeking to expand knowledge of empirical phenomena, regardless of the short-term application of that knowledge. The immediate goal of basic science is knowledge for knowledge's sake.[12]

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11 This category is a fixed 8 credits (4 credits per course), as are some other categories in the curriculum fixed.
5 credit course exceptions:

- *Common Course Numbering - We will allow an exception for a 5-credit course in this specific category if, and only if, a specific course is forced to move to 5 credits when Common Course Numbering dictates.*
- *Current 5 credit Bacc Core Courses – 5 credit courses are not permitted in this category unless they are double dipping with an academic major and the major is willing to absorb the credit differential (per the Faculty Senate ratified rationale), in which case current 5 credit Bacc Core lab science courses could be considered (i.e. Physics and Chemistry).*

12 Lumen Learning - The Process of Science: https://courses.lumenlearning.com/suny-biology1/chapter/the-process-of-science/

4. Have a lab as described below:
    a. A lab is at least one credit[13] of experiential activities that collectively employ the full spectrum of the scientific process from observation to analysis, interpretation, and communication of results. Such activities shall have students use scientific methodology, tools, and techniques (as appropriate to the field of inquiry), develop and/or use qualitative or quantitative observations from either primary or secondary data, and apply science concepts for inquiry into natural systems or phenomena. Students shall make interpretations, draw conclusions that are rooted in empirical evidence, and communicate their results. Lab component must constitute at least 25% of the 4-credit course grade.
5. Explicitly teach the process of science. The process of science is defined as the iterative and objective manner in which scientists gather data about observable natural phenomena using discipline-appropriate research methods, analyze these data, form hypotheses based on the data, and communicate to and work within a global community of individuals and organizations contributing to science.[14].
6. If possible, address how scientific issues impact social and environmental justice.

Definitions

Natural Science: The systematic study of the structure and behavior of the physical and biological universe through observation, experimentation, and the testing of theories against the evidence obtained.

Lab Science: A lab is at least one credit[15] of experiential activities that collectively employ the full spectrum of the scientific process from observation to analysis, interpretation, and communication of results. Such activities shall have students use scientific methodology, tools, and techniques (as appropriate to the field of inquiry), develop and/or use qualitative or quantitative observations from either primary or secondary data, and apply science concepts for inquiry into natural systems or phenomena. Students shall make interpretations, draw conclusions that are rooted in empirical evidence, and communicate their results. Lab component must constitute at least 25% of the 4-credit course grade.

Process

The Scientific Inquiry and Analysis LOCR Workgroup met a total of four times for 4.5 hours following the LOCR training sessions. The committee has broad representation from across colleges (CEOAS, COS, CAS, COF, CLA) and from faculty with experience in teaching both biological and physical sciences perspectives Category in the current Bacc Core. We utilized the previous Bacc Core Learning Outcomes for Perspectives (Biological and Physical Sciences with a lab) category, the AAOT Natural Sciences Learning Outcomes and National Association of Research on Science Teaching "Science Process Skills" to help frame our discussion about Learning Outcomes and Criteria. The workgroup built broad consensus around learning outcomes and criteria here. Rationale are directly from BCRC Report with minor edit to language about designation based on new BCC policy.

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13 OSU's credit hour policy: https://registrar.oregonstate.edu/osu-credit-hour-policy

14 Modified from Carpi, A., Egger, A.E. Vision Learning The Process of Science. https://www.visionlearning.com/en/library/Process-of-Science/49/The-Process-of-Science/176

15 OSU's credit hour policy: https://registrar.oregonstate.edu/osu-credit-hour-policy

Version History: LOCR Proposal and Report, V. 3, March 1, 2023 (DPO FAQs updated)

DIFFERENCE, POWER, AND OPPRESSION (DPO): FOUNDATIONS AND ADVANCED

DPO Foundations Rationale

The inequitable distribution of social, economic, and political power in the United States and globally is sustained through systems of oppression, which represent a variety of discriminatory institutional beliefs and practices. These beliefs and practices obscure the origins and operations of systemic oppression in daily life, such that this inequitable power distribution is assumed to be the natural order.

The Difference, Power, and Oppression requirement engages students in critical reflection on the complexity of the structures, institutions, and ideologies that sustain systemic oppression, discrimination, and the inequitable distribution of systemic power and resources within and across communities. Such examinations will enhance and promote responsible, ethical, and anti-racist engagement in our diverse university community and society in the United States and beyond.

DPO Foundations Learning Outcomes
Students in DPO Foundations will:

1. Explain how ascribed differences are socially constructed, change over time, and impact our and others' lived experiences.
2. Articulate– using historical and contemporary examples – how ascribed differences, combined with inequitable distribution of power across cultural, economic, social, and/or political institutions, result in racism and intersect with other forms of systemic oppression.
3. Describe how assets and resilience demonstrated by members of systematically marginalized communities and cultures play a role in dismantling racism and other systems of oppression.

DPO Foundations Criteria
Courses in DPO Foundations will:

1. Be at least 3 credits and be at the 100-200 level.
2. Be capped at 50 students, (larger lectures with recitations capped at 25 are acceptable). Proposed exceptions to class size caps should be justified through the course proposal process and will be reviewed on an on-going basis by the Bacc Core Committee and the Difference, Power, and Oppression Director.
3. Be regularly numbered departmental offerings rather than x99 or blanket number courses.
4. Provide opportunities for students to reflect thoughtfully on their own identities and positions in relation to systems of oppression.
5. Focus primarily on Difference, Power, and Oppression in the United States, although global contexts and impacts of the United States are encouraged.
6. Provide illustrations of ways in which structural, institutional, and ideological oppression arise from socially defined meanings attributed to difference.
7. Provide historical and contemporary (last 10 years) examples of difference, power, and oppression across cultural, economic, social, and/or political institutions.
8. Provide examples of ways in which oppression and privilege occur differently along intersecting identities.
9. Incorporate inclusive pedagogy activities and strategies (e.g., low-risk and ungraded, classroom discussion, small group work, debates, idea mapping, readings from diverse voices, contract grading, and labor-based grading).

10. Include learning materials that are authored or created by people of protected status (statuses as defined by OSU's discrimination and discriminatory harassment policy[16]) that illustrate the resilience of their communities and how these assets are used to dismantle systems of oppression.
11. Require instructors and recitation instructors to have ongoing training and continuing education (at least once every other year or as defined by the DPO director while teaching DPO) in intersectionality and/or other forms of social justice theories. Option for co-teaching with faculty with more expertise in DPO is encouraged as applicable through Memorandums of Understanding.

DPO Advanced Rationale

The inequitable distribution of social, economic, and political power in the United States and globally is sustained through systems of oppression, which represent a variety of discriminatory institutional beliefs and practices. These beliefs and practices obscure the origins and operations of systemic oppression in daily life, such that this inequitable power distribution is assumed to be the natural order.

The Difference, Power, and Oppression requirement engages students in critical reflection specific to their field of study on the complexity of the structures, institutions, and ideologies that sustain systemic oppression, discrimination, and the inequitable distribution of systemic power and resources within and across communities. Such examinations will enhance and promote responsible, ethical, and anti-racist engagement by preparing students to understand and disrupt these systems as they manifest in their field.

DPO Advanced Learning Outcomes
Students in DPO Advanced will:

1. Analyze how systemic power operates through the ascription of difference to reproduce structural inequities and how they and others in their field of study are positioned in relationship to those systems.
2. Demonstrate, by using social justice theories, how historic constructions of racism and other forms of systemic oppression result in intersecting inequities – crossroads of oppression – experienced in current times (last 10 years).
3. Compare approaches for dismantling racism and other systems of oppression within their field of study with the goal of advancing cultural, economic, social, and/or political equity.

DPO Advanced Criteria
Courses in DPO Advanced will:

1. Be at least 3 credits and be at the 300-400 level.
2. Be capped at 25 students (larger lectures with recitations capped at 25 are acceptable). Proposed exceptions to class size caps should be justified through the course proposal process and will be reviewed on an on-going basis by the Bacc Core Committee and the Difference, Power, and Oppression Director.
3. Be regularly numbered departmental offerings rather than x99 or blanket number courses).
4. Provide opportunities for students to reflect thoughtfully on their own identities and positions in relation to systems of oppression.
5. Have as their central focus the study of the inequitable distribution of power within the framework of particular disciplines and course content.
6. Be taken within the major or in the student's field of study. Field of study can be defined as a course that relates to a student's major and/or future career.
7. Provide illustrations of ways in which structural, institutional, and ideological oppression arise from socially defined meanings attributed to difference.

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16 OSU's University Policies and Standards Discrimination and Discriminatory Harassment: https://policy.oregonstate.edu/policy/discrimination-and-discriminatory-harassment

8. Provide historical and contemporary (last 10 years) examples of difference, power, and oppression across cultural, economic, social, and/or political institutions.
9. ==Focus primarily on Difference, Power, and Oppression in the United States, although global contexts and impacts of the United States are encouraged.==
10. Incorporate inclusive pedagogy activities and strategies (e.g., low-risk and ungraded, classroom discussion, small group work, debates, idea mapping, readings from diverse voices, contract grading, and labor-based grading).
11. Must include learning materials that are authored or created by people ==of protected status (as defined by OSU's discrimination and discriminatory harassment policy)== that illustrate the resilience of ==their communities== and how these assets are used to dismantle systems of oppression.
12. Require instructors and ==recitation instructors== to have ongoing training and continuing education (at least once every other year or as defined by the DPO director while teaching DPO) ==in intersectionality and/or other forms of social justice theories==. Option for co-teaching with faculty with more expertise in DPO is encouraged as applicable through Memorandums of Understanding.

Definitions

Ascribed differences: Differences that are assigned to an individual based on biological and phenotypical characteristics and societal biases (e.g., gender, race, sexual orientation).

Field of study: Relating to a student's major and/or future career.

DPO Global: Processes, patterns and phenomena which operate at multiple scales, including the transnational, multinational or binational.

Lived experience: Personal knowledge about the world gained through direct, first-hand involvement in everyday events rather than through representations constructed by other people.

Protected status: A legally protected category or characteristic of an individual or group of individuals. The university prohibits unlawful discrimination on the basis of these protected statuses: age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, citizenship, marital or family status, pregnancy, disability, genetic information, protected veteran status / service in the uniformed service, or any other status protected by law or OSU policy.

Social justice theories: Systems of ideas that analyze the form and function of power in society and how it is distributed among individuals and communities. Social justice theories are often discipline or field specific.

Systemically marginalized communities: Groups and communities that experience discrimination and exclusion (social, political, and/or economic) because of unequal power distribution across economic, political, social and cultural dimensions.

Process

DPO Foundations
- LO 1: The committee wanted to create LOs that prompted self-reflection with regards to the impacts of racist systems. With OSU being a predominantly white institution, we felt it was important for students to understand who ascribed differences provide privilege to some communities while oppressing others.
- LO2: The committee emphasized the importance of having both historical and contemporary examples of oppression so that students see the work of anti-oppression as ongoing. Also, the specific focus on racism was part of our mandate but we also felt that an intersectional approach is important to all discussions about racism.

- LO3: The committee wanted students to recognize and value the work being done by oppressed communities to fight racism and other systems of oppression.

DPOI Advanced
- LO 1: The committee wanted to create LOs that prompted self-reflection with regards to the impacts of racist systems. With OSU being a predominantly white institution, we felt it was important for students to understand who ascribed differences provide privilege to some communities while oppressing others.
- LO2: The committee emphasized the importance of having both historical and contemporary examples of oppression so that students see the work of anti-oppression as ongoing. Also, the specific focus on racism was part of our mandate but we also felt that an intersectional approach is important to all discussions about racism. We define "current times" as 10 years so that DPO classes provide content that shows that racism and other forms of oppression are not things of the past.
- LO3: The committee wanted students to recognize and value the work being done by oppressed communities and allies to fight racism and other systems of oppression.

DPO FAQs

Question: *Why are DPO classes defining contemporary/current times to 10 years?*

> *Answer:* *The DPO workgroup emphasized the importance of having both historical and contemporary examples of oppression so that students see the work of anti-oppression as ongoing. We define "current times" as 10 years so that DPO classes provide content that shows that racism and other forms of oppression are not things of the past.*

Question: *Why are the DPO classes focused on brining attention to DPO issues in the United States when DPO occurs in other countries?*

> *Answer:*

- *For 20 years, the Difference, Power, and Discrimination program at Oregon State University has worked to create an inclusive curriculum that addresses institutionalized systems of inequity and privilege in the United States[17].*
- *A focus solely on the US is problematic because it treats the US as more important or more valuable than other settings. It denies what we have learned about expanding students' horizons in order to develop self-understanding. A better approach would require that DPO classes include learning about the US but not exclude courses that focus on other countries or transnational processes resulting in racism and systemic oppression. The criteria we developed do not exclude courses focused solely on the US. But they do allow for courses in which students learn about other settings, while asking them to reflect on how what they learned plays out in the US context.*
- *Limiting DPO only to courses that focus on the US excludes valuable learning that occurs when exploring how racism and systemic oppression function in other countries, and transnational contexts. Although we recognize that national contexts and their comparison are fundamental, we seek to emphasize that ascribed difference, power and systems of oppression operate at multiple scales.*
- *Seeing the US as one country, and not the center of the world, is more in line with an approach that dismantles asymmetrical power dynamics and oppression. In fact, racism's and colonization's histories are by nature global. It is also remarkable how anti-racism movements share repertoires of contention (means of dismantling racism) across global contexts.*

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17 Difference, Power, and Discrimination History at OSU: https://dpd.oregonstate.edu/history

Version History: LOCR Proposal and Report, V. 3, March 1, 2023 (DPO FAQs updated)

Question: *The course capacities of 25 students in Advanced DPO seems costly for colleges and units to implement, are there any exceptions to course sizes that can be made?*

> **Answer:** *The DPO Workgroup discussed comments and concerns regarding course capacities presented through the listening sessions. The course capacities were recommended by the Bacc Core Reform Committee and the Faculty Senate adopted the recommendations. While the DPO workgroup did agree that courses could be larger than 25 with exceptions granted through the current Scheduling Procedure Exception Process[18], they did not develop a framework. Instead, the Bacc Core Committee and the DPO Director will be tasked through implementation to develop a policy and implement a workflow approval process for future course capacity exceptions.*

TRANSITIONS

Transitions Rationale

Through the Transitions category Oregon State University commits to consciously and deliberately supporting students beginning their OSU educational journey. Students will formulate goals and strategies for their personal, academic, and professional growth; identify ways to engage in their communities; familiarize themselves with tools and resources for student success; and understand the common values that guide OSU's undergraduate education.

Transitions Lower Division Learning Outcomes
Students in Lower Division Transitions will:

1. Construct goals and individualized strategies for personal well-being, academic success, and professional development.
2. Practice community-building approaches that allow one to engage in society.
3. Identify institutional resources and tools necessary for student success and well-being.
4. Reflect on how their plans connect to OSU's General Education and the institutional mission.

Transitions Upper Division Learning Outcomes
Students in Upper Division Transitions will:

1. Create and implement goals and individualized strategies for personal well-being, academic success, and professional development.
2. Evaluate community-building approaches that allow one to engage in society.
3. Identify institutional resources and tools necessary for student success and well-being.
4. Reflect on how their plans connect to OSU's General Education and the institutional mission.

Transitions Criteria
Courses in Transitions will:

1. Be at least 2 credits, graded with letter grading (A-F). Class sizes are to be capped at 35 students (larger lectures with recitations capped at 35 are acceptable). Prerequisites or discipline-specific offerings for Transitions courses must not create unreasonable barriers for students seeking to fulfill these categories.
2. Be offered at the lower division (100) and upper division (300) level. Students who are in their first postsecondary education after high school will enroll in the lower division courses, whereas students who have attended other higher education institutions and are further along their educational journey will enroll in the upper division courses.
3. Introduce common technological tools and campus resources and students will critically consider and utilize tools and resources related to their individualized goals.
   a. e.g., tools including learning management systems, curriculum mapping, career development, student engagement platforms, and resources such as academic success, tutoring, co-curricular high impact practices.
4. Include guidance, instruction and materials for personal well-being. Students will reflect on multiple aspects of well-being, including, but not limited to mental health and financial literacy.
   a. e.g., health behaviors, living in a diverse community, self-discovery, and growth mindset .
5. Engage students in career exploration process and students will identify potential career goals and relevant actions they can take towards those goals.
   a. e.g., clarifying values, interests, strengths, and researching potential career fields, online career development exploration, personal interest inventory.

6. Engage in inclusive community-building approaches, and students will engage in at least one interaction to develop students' community while attending OSU.
    a. e.g., Inclusive Communities module, low-risk and ungraded learning activities, classroom discussion, small group work that encourage leadership skills, interpersonal skills, cross-cultural awareness.
7. Introduce the mission and values that guide undergraduate education at OSU, and students will articulate how general education serves those values.
    a. e.g., academic success habits, academic integrity, purpose of general education, Land/Sun/Sea/Space grant designations, Tier I Research institution.
8. Include learning materials that are approved by Transitions Coordinator and created by experts within those areas at OSU
    a. e.g., mental health modules created by CAPS and approved by Transitions Coordinator, financial literacy.
9. Require instructors to engage in training developed by the Transitions Coordinator, Baccalaureate Core Director, and/or the Center for Teaching & Learning to ensure instructors are approaching the centralized curriculum in a similar manner.

Transitions FAQs

The Transitions LOCR group received substantial feedback, the majority of which was consistent with its internal discussions as it was developing the elements of the LOCR. Many of the most challenging questions were in fact implementation questions that were beyond the scope of the group; that said, we aggregated those with the intent of forwarding them to the teams working on next-stage implementation. The list below reflects a mix of the particular questions we received about LOCR as well as the most often cited implementation questions. We anticipate them also being the most common questions raised in Faculty Senate discussions.

1. *Question: It doesn't seem like there are many differences in outcomes for Upper and Lower Division. Was that intentional?*

    Answer: Several questions were asked about similarities and differences between the upper division and lower division outcomes. They are thematically related, with upper division outcomes requiring more "action" in outcomes (1) and (2) than the lower divisions, written in congruence with the universities policies on course level outcomes. The remaining outcomes are similar between the two levels of coursework. This is because we believe all students need the implied introductions to the mission and values that guide their OSU education and the systems they must be acquainted with in order to succeed.

2. *Question: Why were Canvas, Kognito, and other OSU programs not specifically mentioned in the criteria?*

    Answer: We were asked about the absence of particular signature programs and platforms in our LOCR – e.g., Kognito, Canvas, MyDegrees. We sought to future-proof the Transitions category by naming types of programs or platforms (e.g., learning management systems) but allowing for the possibility that the particular LMS could change over time.

3. *Question: When are students required to enroll in a Transitions course?*

    Answer: We advocate that the course be taken during a student's first term at OSU for maximum benefit. That will challenge some departments and programs in terms of the frequency of offering, but will also be complicated in cases of dual enrollment where the "first term" may be less clear.

4. *Question: Will Transitions courses be taught in colleges or centrally?*

    Answer: Per the Faculty Senate, a Transitions course may be offered in a College or, if needed, centrally. The LOCR generated, for a 2-credit course, will require reimagination of existing on-boarding curricula, and we anticipate the creation of new offerings from Colleges that don't currently have analogous courses. If

Colleges do not choose to offer the curriculum, though, central academic administration may need to offer sections as well.

5. **Question: Which students will enroll in the lower division section vs. upper division sections?**

   Answer: Students will take only one Transitions course and will be directed to lower or upper division sections. We advocate for students entering OSU as their first postsecondary education after high school enroll in the lower division section (i.e "first year" or "first time in college" students), and those students who have attended other higher education institutions enroll in the upper division section (i.e. "transfer" or "readmit" students). It isn't yet clear where the line will be drawn to align enrollment to one course level or the other, but we anticipate those involved in the implementation will clearly define enrollment parameters.

6. **Question: A Transitions Coordinator is mentioned a few times in the criteria. Is this a new position to OSU?**

   Answer: Recognizing the coordination required to implement this category, the university is investing resources in personnel, and we anticipate the Transitions Coordinator will be funded. Details on the exact position description and duties have not yet developed, but we anticipate work on this effort beginning soon.

BEYOND OSU CAREER INTEGRATION

Beyond OSU I and II Rationale

Student surveys suggest that nearly all students list career-related goals as a primary reason they come to college. The Beyond OSU requirement is intended to incorporate career development into the curriculum, thereby ensuring that every student has the skills and knowledge needed to find meaningful work in their field or advance in their current career after completing their academic journey at OSU. The focus of Beyond OSU will be on career preparation activities that prepare students for their post-graduation goals. Beyond OSU will also help students connect their experiences to the career readiness and career advancement skills both employers and universities have deemed necessary to succeed in the working world: the NACE competencies[19].

Beyond OSU is a minimum non-credit requirement, meaning students are not paying additional money to enroll in a course or to take credits to receive education and support the university deems critical to student success. Non-credit requirements are not meant to be a check box or add a burden to students, rather they are ensuring all students getto plan for their future and economic advancement. Beyond OSU I emphasizes educating students on career development concepts* related to students' career goals. Beyond OSU II requires students to gain insights through participating in experiences and apply those concepts to their future goals.

Beyond OSU I: Prepare Learning Outcomes
Students in Beyond OSU I will:

1. Illustrate how their OSU and related experiences connect to career readiness and career advancement skills.*
2. Apply life-long career development concepts* through the creation of career relevant artifacts.*

Beyond OSU I: Prepare Criteria
Courses in Beyond OSU I will:

1. Be at a minimum a non-credit requirement that students take to complement for-credit courses. Transcript visible non-credit requirements help to round out a student's education to demonstrate career readiness and career advancement skills*. Colleges and programs with for-credit courses that meet the criteria and learning outcomes are eligible to have their specific course fulfill this category. Those credits count toward the 180 credits needed to graduate.
2. Demonstrate, as a non-credit course, that students have spent 7-10 hours to complete this requirement, whereas a for-credit requirement institutionally must meet 30 contact hours per credit.
3. Require First year students to follow the sequence – Transitions, Beyond OSU I, Beyond OSU II (therefore Transitions must be completed before taking this course). It is strongly recommended that transfer students also follow the sequence, however, they may take Beyond OSU and Transitions at the same time.
4. Allow for-credit courses that satisfy the Learning Outcomes and Criteria for both Beyond OSU I and Beyond OSU II to be combined within the same course.
5. Require students to create artifacts related to the students' career goals and interests. These can include resume/CV, cover letter, LinkedIn profiles, personal statements, portfolios, or teaching philosophy.
6. Emphasize the NACE Career Competencies and how students are building these through coursework, research, clubs, student employment, experiential learning, and other life experiences.
7. Emphasize educating students on career development concepts* related to students' career goals.

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19 NACE Career Competencies: https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/

BEYOND OSU II: Engage Learning Outcomes

Students in Beyond OSU II will:

1. Apply career development concepts to relevant artifacts* from engagement in a career related experience or activity.

Beyond OSU II: Engage Criteria

Courses in Beyond OSU II will:

1. Be at a minimum a non-credit requirement that students take to complement for-credit courses. Transcript visible non-credit requirements help to round out a student's education to demonstrate career readiness or advancement skills*. Colleges and programs with for-credit courses that meet the criteria and learning outcomes are eligible to have their specific course fulfill this category. Those credits count toward the 180 credits needed to graduate.
2. Demonstrate, as a non-credit course, that students have spent 7-10 hours to complete this requirement, whereas a for-credit requirement institutionally must meet 30 contact hours per credit.
3. Require first year students to follow the sequence – Transitions, Beyond OSU I, Beyond OSU II (therefore Transitions must be completed before fulfilling the Beyond OSU requirement). It is strongly recommended that transfer students also follow the sequence, however, they may take Beyond OSU and Transitions at the same time.
4. Allow for-credit courses that satisfy the Learning Outcomes and Criteria for both Beyond OSU I and Beyond OSU II to be combined within the same course.
5. Require students to gain insights through participating in experiences that can include but are not limited to: site visits, career fairs, job shadowing, informational interviews, internships, undergraduate research, alternative spring break, or other experiential learning opportunities, capstone experiences.
6. Provide students the opportunity to reflect on career focused experiences either by connecting their experiences inside and outside the classroom to the NACE competencies and their future goals or by updating their career artifacts based on their experiences in Beyond OSU.

Definitions

Career readiness and advancement skills: Career readiness and career advancement is a foundation from which to demonstrate requisite core competencies that broadly prepare the college educated for success in the workplace and lifelong career management. These skills are based on the National Association of College Employers (NACE) Career Competencies[20], whose website also includes sample behaviors that can be used for assessment of the competencies.

- **Career & Self-Development** - Proactively develop oneself and one's career through continual personal and professional learning, awareness of one's strengths and weaknesses, navigation of career opportunities, and networking to build relationships within and without one's organization.
- **Communication** - Clearly and effectively exchange information, ideas, facts, and perspectives with persons inside and outside of an organization.
- **Critical Thinking** - Identify and respond to needs based upon an understanding of situational context and logical analysis of relevant information.
- **Equity & Inclusion** - Demonstrate the awareness, attitude, knowledge, and skills required to equitably engage and include people from different local and global cultures. Engage in anti-racist practices that actively challenge the systems, structures, and policies of racism
- **Leadership** - Recognize and capitalize on personal and team strengths to achieve organizational goals.

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20 NACE Career Competencies: https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/

- **Professionalism** - Knowing work environments differ greatly, understand and demonstrate effective work habits, and act in the interest of the larger community and workplace.
- **Teamwork** - Build and maintain collaborative relationships to work effectively toward common goals, while appreciating diverse viewpoints and shared responsibilities.
- **Technology** - Understand and leverage technologies ethically to enhance efficiencies, complete tasks, and accomplish goals.

Career development concepts are areas of life-long learning related to career and professional development. They can include but are not limited to: understanding one's own strengths and interests, understanding and planning for future educational pursuits; articulating how one's experiences, skills, interests and values relate to future educational and career goals; identifying relevant tools in the job or graduate school search; navigating the job or graduate search process; activating support networks, including requesting references, seeking mentorship, and building connections in a target industry; building a professional online presence; and understanding and applying interview and informational interview skills.

Career relevant artifacts are documents students create in the pursuit of their professional goals. They can include but are not limited to: graduate school personal statements; curriculum vitaes; content for graduate school applications; portfolios; teaching philosophies; resumes; cover letters; LinkedIn Profiles; support network maps; and reflections on career goals, mock interviews, informational interviews, or job shadowing.

Career-related experiences or activities are hands-on learning opportunities that provide students with the opportunity to reflect on their career artifacts and make relevant changes. They can include but are not limited to: site visits, career fairs, career workshops, job shadowing, student employment, internships, experiential learning, research, capstones, mock interviews, informational interviews.

Seeking Solutions Rationale

A central goal of this category is to have students wrestle with complex, multifaceted problems, and work to solve them and/or evaluate potential solutions from multiple points of view. Overall, this is a course that is designed to deepen how students think about problem-solving in ways that transcend disciplinary-specific approaches. Specifically, we want to help students achieve transdisciplinary thinking - a method of studying complex problems that integrates ideas from diverse scholarly fields in order to deal with the inherent complexity of some urgent problems of the present human situation (Oxford).

In response to longstanding campus interest in implementing a teamwork component into general education requirements, Seeking Solutions courses will include interdisciplinary student teamwork as a core component. Teamwork is a prominent component of best practices in general education. In addition, stakeholder groups, notably our industry partners, consistently emphasize that working in groups with disparate others (people with different backgrounds, goals, and priorities) is an area in which students need experience and practice.

The issues and problems that are the focus of this category should consider the global dimension of the problem, in accord with our goals for learning and general education at OSU.

The complexity of requirements for this category, including training for course developers and Instructors, Indicates the need for a Coordinator position comparable to the WIC and DPO Directors. In addition to coordinating training and support, the Seeking Solutions Coordinator could be a resource for faculty interested in team-teaching, review of course content, or other collaborations for activities in this gen ed category.

Seeking Solutions Learning Outcomes
Students in Seeking Solutions will:

1. Analyze a complex, multi-faceted issue that is resistant to a simple solution, including the scope of the problem, identifying and defining its causes, and impacts on a diverse variety of stakeholders.
2. Evaluate the consequences of different approaches or solutions to a complex, multi-faceted issue.
3. Develop a communication plan or product to explain the problem or its potential solutions to one or more identified stakeholder group or other "real world" audience.
4. Demonstrate skills that enable effective collaboration through interdisciplinary teamwork in one or more of these learning outcomes.*

   *requires that this outcome is assessed

Seeking Solutions Criteria
Courses in Seeking Solutions will:

Curriculum Requirements:

1. Have no prerequisites.
2. Be restricted to students with Junior or Senior standing.
3. Not double count for major requirements.
4. Require recertification for a course to remain in the Seeking Solutions category by requiring enrollment of <=50% majors, averaged over the previous 2 years.

Course Content:

1. Be current societal/planetary issues of global relevance
2. Require syllabi to incorporate ==substantial== content or approaches from **both** of these broad areas of study and inquiry:
    a. Biophysical (aka Natural) Sciences or Engineering.
    b. Social Science and Human Behavior or Arts and Humanities.

Course structure:

1. ==Require interdisciplinary student teamwork and must be supervised by a trained Instructor (see Training, below).==
2. Set group size at 4-7 students.
3. ==Have class size, credit hours, and recitations (optional) that can accommodate at least 30 minutes of supervision and mentoring per week per group.==
4. Have groups that should consist of students from different disciplines ==and majors==, to the extent practicable.
    a. Alternatively, students can explore an issue through different (perhaps assigned) disciplinary lenses.

Training:

Course Developers and Instructors, including Graduate Teaching Assistants, will be required to complete training ==prior to teaching a Seeking Solutions course. The curriculum for the training will be developed by the Center for Teaching and Learning along with experts in group learning facilitation and transdisciplinary education in consultation with a committee of faculty from the Colleges. The training will cover the purpose of the Seeking Solutions category, transdisciplinary teaching approaches[21] for non-majors==, and group learning facilitation and assessment[22]. Group learning facilitation training will need to include specific guidance for online learning environments. Training could also include skills for communication with diverse, non-academic audiences.

Professional Development:

Course Developers, Instructors, and Graduate Teaching Assistants are encouraged to organize and attend professional development events in order to share approaches and best practices for delivering Seeking Solutions courses.

==Category Coordination==:

==We recommend a designated Seeking Solutions Program Coordinator to organize trainings, serve as a resource for course developers and instructors, and serve as a nexus for faculty who seek knowledge partners and co-instructors for their courses. The Coordinator will work with Colleges to identify incentives for faculty to lead smaller and field-based courses, as well as support needs for Seeking Solutions training, course development, and course offerings.==

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21 For general information on transdisciplinary approaches to education, see:
https://citl.news.niu.edu/2020/11/17/transdisciplinary-interdisciplinary/

22 Center for Teaching and Learning: https://ctl.oregonstate.edu/sites/ctl.oregonstate.edu/files/infographic_-_implementing_successful_collaborative_group_work.pdf

Version History: LOCR Proposal and Report, V. 3, March 1, 2023 (DPO FAQs updated)

Definitions

Transdisciplinarity

- International Bureau of Education[23]
    - o An approach to curriculum integration which dissolves the boundaries between the conventional disciplines and organizes teaching and learning around the construction of meaning in the context of real-world problems or themes.

- Oxford Dictionary of Public Health[24] (summarized)
    - o A method of studying complex problems that integrates ideas from diverse scholarly fields in order to deal with the inherent complexity of some urgent problems of the present human situation. The aim is to evolve a conceptual framework that embraces and seeks to mobilize ideas from every pertinent scientific and scholarly discipline: physical, biological, social, and behavioral sciences; economics; politics; and the humanities.
- International Society of Transdisciplinary Engineering[25]
    - o Transdisciplinarity is characterizing modern research areas, in which natural sciences are integrated with social sciences, requiring mixed methodologies for achieving the work. It is expected to be a significant basis for future evolution, especially in all Engineering areas

Global relevance

Course topic(s) should be broad issues that impact (or are impacted by) human societies on a global scale. Local Issues that connect to the broader course topic may be the subject of case studies or student projects, but they should be connected to the larger scale problem. The United Nations categories of global issues[26] is a good starting place for identifying issues that transcend national boundaries. Issues and solutions that span the Global North and Global South are encouraged.

Stakeholders

Stakeholders are individuals, groups, or organizations in society that have an interest or concern with an issue. The general public may be considered a stakeholder, but it is generally helpful to identify groups within the public that share common interests, cultures, or beliefs.

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23 International Bureau of Education Transdisciplinary approach: http://www.ibe.unesco.org/en/glossary-curriculum-terminology/t/transdisciplinary-approach

24 Oxford Dictionary of Public Health: https://www.oxfordreference.com/display/10.1093/acref/9780191844386.001.0001/acref-9780191844386-e-4513;jsessionid=C511BD1E5F3FFCF57AC9885A87DE111B

25 International Society of Transdisciplinary Engineering: https://intsoctransde.org/about/#:~:text=Transdisciplinarity%20is%20characterising%20modern%20research,especially%20in%20all%20Engineering%20areas.

26 United Nations Global Issues: https://www.un.org/en/global-issues

The Committee offers the following rationale for each Learning Outcome.

Students in Seeking Solutions will:

1.   Analyze a complex, multi-faceted issue that is resistant to a simple solution, including the scope of the problem, identifying and defining its causes, and impacts on a diverse variety of stakeholders.

Rationale/guidance:

- Instructors may identify an issue (problem) in advance or have students define (or focus) the problem. Courses may be based around an issue or a broader subject that provides context for the issue. Problems addressed in Seeking Solutions classes should be of interest to a diversity of OSU students from different Colleges.
- The intent is that the issues (problems) have global relevance. The specific manifestation may be geographically restricted, but the global dimensions of the problem must be clear. (e.g., homelessness in Portland would be connected to global economic or other drivers).
- It is intended that the consequences be evaluated from a variety of perspectives, such as ethical, economic, environmental, etc. It is important for students to understand how a problem looks different depending on one's perspective.
- It is not intended that a student play the role of the expert from a discipline; many students will not have sufficient disciplinary training to do so at the time they take this class.

2. Evaluate the consequences of different approaches or solutions to a complex, multi-faceted issue.

Rationale/guidance:

- It is intended that the class explore two or more potential solutions, preferably solutions that are qualitatively different in nature. The instructor has latitude to decide how the class will develop and evaluate these potential solutions (e.g., different groups develop or evaluate different solutions, vs. whole class engages in the process together).
- It is intended that the consequences be evaluated from a variety of perspectives, such as ethical, economic, environmental, etc. Students should recognize that "wicked problems"[27] have no single, perfect solution, and that all potential solutions entail trade-offs.
- For the purposes of this Gen Ed category, the aspiration is to gain a transdisciplinary perspective on the issue and potential solutions. Hence, drawing from multiple sub-disciplines (e.g., different branches of engineering, or different fields within humanities) would not conform to the spirit of the category.
- Instructors should consider the effects of different potential solutions that vary depending on the geographic and/or temporal bounds (i.e., scale) one puts on the "problem."
- Team teaching may be an effective way to ensure adequate expertise across dimensions (though it is not required).

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27 Term coined by Rittel and Webber [1973]. 'Dilemmas in a General Theory of Planning.' Policy Sciences 4 (2): 155–169. "These problems are complex, lack clear boundaries, and attempts to solve them – generally by bringing together multiple stakeholders with contrasting viewpoints – have unforeseen consequences" (McCune et al., 2021. Teaching wicked problems in higher education: ways of thinking and practicing. Teaching in Higher Education, DOI: 10.1080/13562517.2021.1911986)

3. Develop a plan or product to communicate approaches to addressing the problem[s] to one or more identified stakeholder group or other "real world" audience

Rationale/guidance:

- Asking students to engage in communication with stakeholders may be too large of a lift for a 10-week class. Instead, classes must include an element where students (individually or collectively) develop a communication plan that they would use, or they can develop a communication product (a press release, an infographic, etc).
- The intent is to demonstrate capability to communicate to external stakeholders (authentic audiences), but encouraging creativity with this outcome may enhance the transdisciplinary outcomes of a course.

4. Demonstrate skills that enable effective collaboration through interdisciplinary teamwork in one or more of these learning outcomes.

Rationale/guidance:

- Demonstration of individual students' teamwork and communication skills (e.g., leadership and followership) is core to this Gen Ed category and needs to be assessed.
- This LO was intentionally separated from the other LOs to give instructors the maximum latitude to create opportunities for students to demonstrate these skills and for the instructor to assess them. Interdisciplinary teamwork is not required for all three of the other LOs, but must be used to meet at least one of them.
- It is recognized that teams may not effectively collaborate; thus, students who are aware of and use collaboration skills could be assessed as achieving this LO, regardless of the quality of a team product. (e.g., they can diagnose what went wrong in a group and possible ways to improve). This could be accomplished as a group process.

Rationale/Guidance for Criteria:

Courses in Seeking Solutions will:

Curriculum Requirements:

1. Have no prerequisites.
2. Be restricted to students with Junior or Senior standing.
3. Not double count for major requirements.
4. Require recertification for a course to remain in the Seeking Solutions category by requiring enrollment of <=50% majors, averaged over the previous 2 years.

It is envisioned that students will register for these courses because of their interest in the issue subject and opportunity to think critically and creatively about some of the toughest problems we face in society. By having no prerequisites, but restricted to upper classmen, the courses will be open to students from a wide variety of majors who bring some disciplinary knowledge.

Out-of-major requirements were considered carefully by the LOCR Team, particularly in light of the Seeking Solutions rationale from the General Education Reform Report, which stated "these courses are intended to be taken outside of a student's major". Ultimately, a slight majority of the LOCR Team agreed that an out-of-major requirement would not meet our goals of interdisciplinarity, due to the similarity of approaches to problem-solving used by many majors, and that we could better meet those goals with other course criteria.

Double counting restrictions are provided to encourage students to explore global issues outside of their primary discipline, which also increases the diversity of students in Seeking Solutions courses.

Student enrollment is not really controllable, although departments may be able set a cap on enrollment by majors. Also, new courses can take time to become established and recognized by students in other Colleges. A review of enrollment at recertification provides an opportunity to check on student diversity and reduce the potential for courses to slide into a more major- or disciplinary-specific focus.

Course Content:
1. Be current societal/planetary issues of global relevance
2. Require syllabi to incorporate ==substantial== content or approaches from **both** of these broad areas of study and inquiry:
    a. Biophysical (aka Natural) Sciences or Engineering.
    b. Social Science and Human Behavior or Arts and Humanities.

The intent is to define disciplines broadly to enable creativity in course development while meeting the definitions of transdisciplinarity that include both the STEM fields and the social arts and sciences. There are many ways to define groups of disciplines that generally share common theory and practices, and some disciplines cross these broad categories of study (for example, health sciences and sustainability sciences). It is recommended that courses include a balance of information and perspectives from these two broad areas, but substantial content (multiple lectures, assignments, and/or discussions) is a requirement.

Course structure:

1. ==Require interdisciplinary student teamwork and must be supervised by a trained Instructor (see Training, below).==
2. Set group size at 4-7 students.
3. ==Have class size, credit hours, and recitations (optional) that can accommodate at least 30 minutes of supervision and mentoring per week per group.==
4. Have groups that should consist of students from different disciplines ==and majors==, to the extent practicable.
    a. Alternatively, students can explore an issue through different (perhaps assigned) disciplinary lenses.

Supervision of groups by a trained instructor is necessary to maximize success in meeting our teamwork and collaboration outcome. Groups of 4-7 follows best pedagogical practices for group learning[28][2]. The minimum of 30 minutes of supervision and mentoring per group is placed as a guide for contact hours, in place of course size restrictions. Online course sections will also require contact hour time for group supervision and mentoring, but in an asynchronous format. The nature of group work will vary depending on modality (Ecampus, campus) and the size of the class, and how the instructor intends to meet the required Learning Outcomes. It is intended that the groups be maximally diverse in terms of disciplinary representation, though it is recognized that the composition of a class is outside the instructor's control.

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28 Journal on Excellence in College Teaching: http://celt.muohio.edu/ject/issue.php?v=25&n=3%20and%204

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Thoughts on course formats

Format	Recita-tion needed?	Feasibility	Expected **contact** hours per term for group work (30 minutes/group)
Large lecture 100 students, group size = 6-7	Yes	Low - this would be a minimum of 15 student groups to manage. Would require multiple recitation sections and/or GTAs for group work, and would likely make time for inter-group sharing (e.g., presentations) prohibitive.	70-80 hours
Medium lecture 70 students, group size = 6-7	Yes	Possible with recitation. 10-12 groups, multiple GTAs	50-60 hours
Small lecture 40 students, group size = 5-7	Likely	Yes, best with recitation. 6-8 groups. At least 1 GTA or co-instructor needed. This size class will be much more manageable for group project sharing.	30-40 hours
Small lecture 25 students, group size = 4-6	No	Yes, with in-class time for group work. 4-6 groups. In class group work on campus would require appropriate classroom configuration needed.	20-30 hours
Colloquium	No	Yes, with class time devoted to group work. May require extra effort to maintain diversity of students and transdisciplinarity	Depends on class size
Small group work focus/experi-ential learning	No	Yes, if students are from different majors/colleges, might require application process	Depends on class size
Field course, e.g., faculty-led study abroad	No	Yes, but must include transdisciplinary group work; transdisciplinarity may arise from non-academic knowledge sources	Depends on class size