

GENERAL CORE GUIDELINES

OLD (Current) GUIDELINES*	NEW (Proposed) GUIDELINES*
<p>Core courses: Introduce students to the "ways of knowing" in the discipline or field of knowledge-the kinds of questions asked, kinds of experiences explored, kinds of skills utilized; the types of theories employed; and the ways in which insight, knowledge, and data are acquired and used.</p>	<p>Core courses: Explicitly help students understand what liberal education is, how the content and the substance of this course enhance a liberal education, and what this means for them as students and as citizens.</p>
<p>Set forth at a basic level the factual information and theoretical and/or artistic constructs that form the foundation of the discipline or field of knowledge, and describe how those facts and constructs were acquired</p>	<p>They employ teaching and learning strategies that engage students with doing the work of the field, not just reading about it.</p>
<p>Courses in the liberal education curriculum should be of high quality, offered frequently and predictably, and of sufficient number to facilitate the timely academic progress of undergraduate students.</p>	<p>They do not (except in rare and clearly justified cases) have prerequisites beyond the University's entrance requirements.</p> <p>They are offered on a regular schedule.</p>
<p>Instruction by regular faculty members and the availability of small group or individual learning opportunities in large classes contribute to a high quality education. We urge that, in the long term, all courses in the liberal education curriculum have both of these characteristics.</p> <p>Core courses include a writing component as appropriate to the discipline (e.g., a final paper, essay examinations, or other graded writing assignments), even if the course is not intended to meet the separate writing intensive requirement.</p>	<p>They are taught by regular faculty (except under extraordinary circumstances).</p> <p>They include small group experiences (such as discussion sections or labs) and use writing as appropriate to the discipline to help students learn and reflect on their learning.</p>
<p>The liberal education requirements include a diversified core in which the number of approved courses is limited. The limited number of approved courses allows students to experience a common curriculum. The Council intends to maintain the reduced size of the diversified core but invites faculty participation from across the Twin Cities Campus</p>	<p>The Howe committee envisioned "a limited number of courses developed <i>specifically to serve these objectives</i>" [emphasis added]. The Council welcomes the creation of separate, new courses specifically to meet liberal education objectives, and especially to meet them in creative, interdisciplinary ways. The Council will be pleased to work with colleges who want to propose a unique approach to Core courses.</p> <p>Rather than dictate an arbitrary number of courses to be approved for the Core, the Council has defined a rigorous set of criteria for inclusion. We urge departments and colleges to consider carefully what courses to propose for the Core, and to invest in fewer courses but pay greater attention to the intent of those courses.</p> <p>The Council will also have a "sunset" policy for core courses; any courses approved for the Core and not offered in a three-year window will be decertified and will no longer be listed as meeting the Core requirements.</p>
	<p>The Council encourages development of "liberal education minors": a cluster of courses, centered around a topic, that as a totality meet most or all of the liberal education requirements, and that have a conscious, explicit focus on helping students to integrate knowledge across the disciplines. A list of currently approved interdisciplinary minors is included in Appendix 2.</p> <p>The Council proposes a pilot program in which students in the University Honors Program would have the opportunity to individualize their liberal education including courses and activities not otherwise approved to meet the requirements. After the pilot has been in place for two years, it should be carefully evaluated to determine whether to continue it, and if so, whether it should continue to be for honors students or whether there are resources available to extend it more broadly across campus.</p>

CORE REQUIREMENTS: COMPARISON

OLD (Current) WORDING*	NEW (Proposed) WORDING*
<p>PHYSICAL AND BIOLOGICAL SCIENCES (two courses, one each in physical and biological science with lab)</p> <p>Comprehension of the hierarchical nature of scientific ideas from fundamental principles to detailed applications;</p> <ul style="list-style-type: none"> • understanding of the important interrelationship between theory and experimental observation; • appreciation that scientific theories are human constructs with well-defined rules of evidence that lead to testable theories through the construction of experiments and the analysis of data; • comprehension of the relationships between simple and complex systems; • and consideration of the personal and social implications of scientific perspectives. <p>(For either physical or biological science) Laboratories or field experiences must engage students in</p> <ul style="list-style-type: none"> • the testing of scientific questions; • the collection, analysis and interpretation of data; and • the critique of alternative explanations and knowledge claims using the accepted criteria of the discipline. 	<p>To satisfy the Biological Sciences Core requirement, a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course provides experimental evidence for how current knowledge in biology was obtained. • The course explores examples of unanswered questions in biology. • Students integrate mathematical thinking into analysis and interpretation of data. • The course includes at least two hours of laboratory per week, in which students have first-hand experience in producing and handling data, using tools of the discipline (i.e., thinking and working like a biologist). • The course includes laboratory experiences in which students do hands-on testing of principles presented in the lecture portion of the course; some laboratory sessions may include computer simulations of experiments or observations that otherwise cannot readily be addressed during a semester (e.g. evolution of a population over thousands of years). • The course provides laboratory experiments that allow students to confront interpretation of mistakes and unexpected results. <p>A lab experience in the Biological Sciences Core requires students to do one or more of the following:</p> <ul style="list-style-type: none"> • perform hands-on experiments, measurements, or analyses that test basic concepts or hypotheses about living organisms; • analyze, interpret, and draw conclusions from data; • examine the relationship between structure and function of biological specimens; • explore biological systems to understand how individual organisms interact with each other and the environment; • use mathematical models to describe or predict responses and behaviors in living systems. <p>To satisfy the Physical Science Core requirement, a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course imparts an understanding of physical phenomena by analyzing and describing the nature, constitution and properties of non-living matter and energy. • Students employ mathematical or quantitative analysis in the description and elucidation of natural phenomena. • The course includes a laboratory or field work component, consisting of, on average, two hours per week, which may involve direct experimentation, fieldwork, or computer simulations. • The course provides an understanding of the scientific method, by which observations lead to the formulation of hypotheses or explanations of physical phenomena that are then empirically tested by experiment or observation. <p>A lab experience in the Physical Sciences Core requires students to do one or more of the following:</p> <ul style="list-style-type: none"> • perform hands-on experiments, measurements, simulations or analyses that test basic concepts or hypotheses; • quantitatively examine and test phenomena that may be described in terms of principles recognized within the discipline; • do discovery-based experiments. • manipulate data sets.

<p>Social Sciences (2 courses). Courses admitted to the Social Sciences Core must address the following issues:</p> <ul style="list-style-type: none"> (1) How social scientists describe and analyze human experiences and behavior; (2) The interrelationships among individuals, institutions, structures, events and ideas; and (3) The roles that individuals play in their cultural, social, economic, and political worlds. 	<p>To satisfy the Social Science Core requirement, a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course demonstrates how social scientists describe and analyze human experiences and behavior. • Students manipulate social science data (primary or secondary) using one or more of the primary quantitative or qualitative methods for collecting and/or analyzing these data. • The course identifies key disciplinary resources and evaluates their quality. • The course explores the interrelationships among individuals, institutions, structures, events and/or ideas. • Students examine the roles that individuals play in their cultural, social, economic, and/or political worlds. • The course promotes multidisciplinary ways of thinking that can be used to synthesize and analyze local, national, and global issues, and the connections among these. • Students work collaboratively and individually to construct new knowledge.
<p>Courses admitted to the Historical Perspective core both examine the human past, studying the beliefs, practices, and relationships that have shaped human experience over time, and introduce students to sources, methods, and conceptual frameworks with which historians interpret the past.</p> <p>In their application of historical methods of study to particular topics, Historical Perspective courses must focus on methods and concepts of historical inquiry, considering how the questions we ask shape the knowledge we make; and on sources from which historians construct interpretations of the past, reflecting on what we can and cannot learn from different kinds of evidence (oral, written, visual, and material; primary and secondary; public and private).</p>	<p>To satisfy the Historical Perspectives Core requirement, a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course examines the human past, studying the beliefs, practices, and relationships that shaped human experience over time. • The course focuses on change over time, giving attention to specific historical contexts. • The course introduces and critically assesses methods and concepts employed in producing historical knowledge. • Students work with primary sources, learning how to do the interpretive work that makes meaning out of historical material. • Students evaluate the uses and the limitations of certain primary sources. • The course considers how the questions we ask and the sources available to us shape our knowledge of the past and our understanding of its significance.
<p>Mathematical Thinking. The goals of the mathematical thinking core requirement are acquisition of mathematical modes of thinking; ability to evaluate arguments, detect fallacious reasoning, and evaluate complex reasoning chains; and appreciation of the breadth of applications of mathematics and its foundations. Courses that satisfy the mathematical thinking requirement can be from a variety of disciplines that introduce and emphasize mathematical modes of thinking rather than computational skills. Courses are encouraged that pique intellectual curiosity and are rooted in clear applications.</p>	<p>To satisfy the Mathematical Thinking Core requirement a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course exhibits the dual nature of mathematics both as a body of knowledge and as a powerful tool for applications. • Students manipulate mathematical or logical symbols. • The math prerequisites and mathematics used in the course must be at least at levels that meet the standards for admission to the University. <p>Acceptable options are: 1) courses dealing with “great ideas in mathematics and its applications,” 2) calculus or other traditional courses in the mathematical sciences, 3) formal logic or applied courses that emphasize mathematical modes of thinking that go beyond rote computational skills. Courses on specific applications of mathematics, such as statistical methods, to a particular field are fine if there is emphasis on underlying mathematical ideas, rather than just recipes for the particular application.</p>

<p>Arts/Humanities requirement (one course in literature, one in “other humanities”) Course proposals for the Art/Humanities core requirement should indicate how the course will address some or all of the following questions:</p> <p>--How and why do writers, filmmakers, studio artists, actors, dancers, musicians, and other creative artists interpret the human condition through their activities?</p> <p>--How and why do scholars interpret the human condition through their study of philosophy, the arts, and cultural expressions?</p> <p>--What are the historical and contemporary contexts in which these artists and scholars comment on the human condition?</p> <p>--What comparisons can they and their audiences make across national, cultural, regional, genre, or other “boundaries” in the process of studying and/or producing art and culture?</p> <p>--What are the tools, perspectives, and methods of the arts and humanities? How and why have these changed over time, and how might they change in the future?</p>	<p>To satisfy the Literature Core requirement, a course must meet these criteria:</p> <ul style="list-style-type: none"> • The course focuses on analysis of written works of literature (fiction, creative nonfiction, poetry, and others), and specifically addresses issues of language and meaning in the works studied. • Students study the formal dimensions of literature: they study how the authors’ choices – such as the choice of genre, style, character presentation, vocabulary, meter or the use of symbolism – have created the literature’s effect of powerfully evoking the reader’s response. • The course examines the social and historical contexts of the literary works as well as their content.
	<p>(One course meeting either of the following)</p> <p>To satisfy the Arts and Humanities Core requirement in Arts a course must meet these criteria:</p> <ul style="list-style-type: none"> • Students create their own artistic efforts. • Students reflect on their artistic efforts in writing or in discussion that develops awareness of the considerations that guide artistic practice and response. • Students become aware of why and how artists select their content, media, and method. • Students develop an understanding of the arts in relation to communities in and for which art is created. • Students examine how the historical dimensions of time, place and culture inform artistic practice. <p>To satisfy the Arts and Humanities Core requirement in Humanistic Studies a course must meet these criteria:</p> <ul style="list-style-type: none"> • Students engage in detailed analysis of and reflection on some humanistic literature or creative product – for example, a philosophical essay, a religious treatise, a work of cultural commentary, or a documentary film. • Students develop their understanding of the works or cultural practices they consider. Where appropriate (for example, in considering a philosophical work) they engage in critical evaluation of the work. • Students examine how the work under consideration arose out of its cultural or historical context. • The course explores the role that the work plays in the larger society of which it is a part.

*Document sources:

Current LE language from the Call for Proposals; full document available at <http://www1.umn.edu/usenate/cle/liberaleducation.html>

Proposed Liberal Education language from the February 2008 CLE Report available at <https://www.myu.umn.edu/public/cle.html>