

**Proposed Language for New Catamount Core Requirements:
Requirement descriptions; Approval Criteria; Student Learning Outcomes**

Curricular Area 1: Liberal Arts (pp. 2-8)

To be considered for a Faculty Senate Vote at the October 19th 2020 meeting.

Curricular Areas 2 and 3 (pp. 9-16)

To be considered for a Faculty Senate Vote at the November 16th 2020 meeting

Please send comments to Pablo Bose (pablo.bose@uvm.edu) by November 9.

**Catamount Core Requirements language submitted for Faculty Senate Approval
in the Liberal Arts Category for VOTE at the 10/19/20 Faculty Senate meeting**

These categories were approved at the May 2020 Faculty Senate Meeting and by the Board of Trustees. The specific language of the four Liberal Arts requirements was circulated prior to the 9/20/2020 meeting and discussed at that meeting. To be further discussed and considered for vote on 10/19/20.

Included here are descriptions and approval criteria for the following requirement categories:

6-credit Arts and Humanities Requirement

The General Education requirement is 6 credits overall; individual school or college curricula may specify that the requirements should be distributed across the subcategories in particular ways.

AH1: Arts and Literature

AH2: Humanities

6-credit Social Science Requirement

S1: Social Science

6-credit Natural Science Requirement

This includes subcategories as follows, but the University-level requirement is for at least 6 credits from either category. Colleges and Schools may still implement specific requirements or pathways to fulfilling these requirements.

N1: Natural Science (without lab)

N2: Natural Science (with lab)

3-credit Mathematics Requirement

MA: Pure Mathematics

Arts and Humanities (AH 1 and AH2) General Education Requirement

Students will take six credits for the Arts and Humanities requirement. To assist students and faculty in understanding this broad field, and to create opportunity for the various colleges to develop more nuanced requirements, we have subdivided the criteria and objectives into two categories: 1) AH1: Arts and Literature and 2) AH2: Humanities. The General Education requirement is 6 credits overall; individual school or college curricula may specify that the requirements should be distributed across the subcategories in particular ways.

AH1: Arts and Literature

Definition:

Arts and literature focus on the understanding, analysis, and production of creative works in a variety of forms, including dance, multimedia, music, theater, visual arts, and writing, among others. While some classes focus on the development of artistic practices within specific forms and genres, others use critical theories to examine the meanings, cultural contexts, and historical development of artistic works. Together they enable students to recognize different artistic traditions, examine individual art works closely using appropriate methods, express their creativity through the rigorous practice of a particular artistic mode, and think critically about artistic works as they relate to different aspects of society and history, including the examination of practices and problems.

Course approval criteria:

Courses must meet at least two of these three criteria:

1. Introduce students to one or more forms, genres, and/or traditions of artistic work.
2. Allow students to practice the creation of artistic works and/or the analysis of creative works, in each case using methods appropriate to the form and disciplinary or interdisciplinary approach of the course.
3. Use critical thinking to examine artistic works as they relate to different aspects of society and history, including the examination of social structures, identities, practices and/or problems.

In addition, the course must address and assess student learning outcomes listed below.

Student Learning Outcomes:

Students completing a course fulfilling the Arts and Literature requirement will:

- Learn to *recognize* selected forms, genres, and traditions of artistic work.
- *Practice* the creation of artistic works and/or the analysis of creative works, in each case using methods appropriate to the form.
- *Develop* critical thinking skills needed to *examine* artistic works as they relate to different aspects of society and history, including the examination of social structures, identities, practices and/or problems.

AH2: Humanities

Definition:

The humanities involve the study of past and present human thought about the way the world works and how people should behave, exploring big questions with which human cultures have grappled for centuries. The study of the humanities helps students to understand what it means to be human and how the past has shaped the present, building skills in using primary source evidence to construct rational arguments, and expanding capacity to empathize with other people.

Course Approval Criteria:

Courses meeting the Humanities requirement should do at least two of the following three things:

1. Expand students' knowledge of cultural constructs and past events and the vocabulary in which humanities scholars describe and characterize them.
2. Train students in the critical analysis of primary sources with an emphasis on how they illuminate broader contexts in which they were constructed.
3. Develop students' skills in the critical analysis of secondary sources to strengthen an understanding and appreciation of humanistic modes of inquiry, including appropriate research questions and use and citation of evidence.

In addition, the course must address and assess student learning outcomes listed below.

Student Learning Outcomes:

After completing a course in the Humanities category of the Arts and Humanities General Education requirements, students should be able to do at least three of the following things:

- Recall and apply basic information and scholarly vocabulary about the cultural constructs or past events that are central to the course.
- Read primary sources for basic comprehension of their contents.
- Read secondary sources in the Humanities for basic comprehension of their contents.
- Analyze a primary source via the application of methods taught or practiced in the course.
- Analyze a secondary source in the Humanities via the application of methods taught or practiced in the course.

Social Science (S1) General Education Requirement

Students will take six credits for the Social Science requirement, to be fulfilled by taking approved courses in the Social Science (S1) requirement.

The social sciences focus on how individuals, groups, and institutions affect and interact with each other. Through systematic investigation, social scientists generate explanatory frameworks for understanding human behavior, action, and social practices. Studying social science prepares students to examine past and present social problems; to think critically about individual, local, regional, and global contexts; and to improve societal well-being.

Course approval criteria:

The faculty member must describe how the course accomplishes all three of the following, including points where student progress towards the Gen Ed Social Science Learning Outcomes will be assessed:

1. Students *develop an understanding* of how individuals, groups, or institutions affect and interact with each other.
2. Students *explore theories* of human behavior, experience, institutions, or social systems.
3. Students *learn about* systematic investigation in social science through the methods and processes of research, such as identifying research questions, data collection, analysis, and representation of findings.

In addition, the course must address and assess student learning outcomes listed below.

Student Learning Outcomes:

In the context of the course topic or field of inquiry, students successfully completing a course fulfilling the Gen Ed Social Science requirement will:

- Be able to draw on course topics, materials, and activities to *describe* how individuals, groups or institutions affect and interact with each other.
- Be able to *identify and demonstrate understanding of* theories of human behavior, experience, institutions, or social systems addressed in the course.
- *Recognize and evaluate* methods and processes of systematic investigation in one or more applied examples of social science research.

Natural Science General Education Requirement

Students will take six credits for the Natural Science requirement, to be fulfilled by taking either N1 or N2 approved courses. Colleges and Schools may still implement specific requirements or pathways to fulfilling these requirements.

In natural sciences courses, students become familiar with scientific thought, observation, experimentation, and formal hypothesis testing. They develop the skills necessary to make informed judgments about scientific information and arguments related to the natural world. Students also gain the ability to assess the impacts of our expanding scientific knowledge and technology on the diversity of life on Earth, and the quality of life for our own species. All courses provide experiences with the methods of scientific inquiry used to develop new knowledge about the natural world.

N1 courses do not include a lab. N2 courses have a laboratory component.

Course Approval Criteria:

Both N1 and N2 courses must:

1. promote the observation of natural systems as a way of knowing, including the analysis of complex phenomena by isolating and studying their components in the field or under controlled conditions,
2. emphasize the process of generating working hypotheses based on both qualitative and quantifiable observations and present the evolution of hypotheses into theories and models that account for observable natural phenomena, and
3. illustrate the use of appropriate theories and models to predict change in natural systems over time.

In addition, to satisfy the N2 requirement, courses must:

1. offer a total of at least three credits integrating scientific theory and practice, typically combining a lecture component and a lab component,
2. have an experiential learning component dedicated to training students in the practice of isolating and studying natural phenomena in the field or under controlled conditions, and
3. engage students in, and assess their understanding of, the scientific method through practical and written work.

Courses approved for the N1 or N2 requirement must address and assess student learning outcomes listed below.

Student Learning Outcomes:

After completing an N1 or N2 course, students will be able to:

1. Demonstrate familiarity with scientific thought, observation, analysis, experimentation, and formal hypothesis testing in relation to the general field or topic of the course.
2. As appropriate to the level and field of the course, make informed judgments about scientific information and arguments related to the natural world.
3. As appropriate to the level and field of the course, use appropriate theories and models to predict change in natural systems over time.

In addition, students completing N2 courses will be able to:

4. Demonstrate understanding of the scientific method through practical and written work.

Pure Mathematics (MA) Requirement

Students will take 3 credits to fulfill the Pure Mathematics Requirement, in courses approved as MA courses.

Familiarity with the language and concepts of mathematics fosters a full appreciation of our world, and is an integral component of the Liberal Arts; the phrase “Math is Everywhere” is true only to the extent that one knows where and how to look. The courses fulfilling this requirement help guide students in developing conceptual understanding of mathematics through engagement with the language of mathematics and processes of mathematical operations. In addition to illustrating the universality and beauty of mathematics, these courses will give student practice in constructing and critiquing arguments through mathematics.

Courses cannot have both an MA and a QD designation.

Approval Criteria for MA courses

To qualify to fulfill the Pure Mathematics requirement, a course must:

1. Be at least 3 credits,
2. Satisfy the Student Learning Outcomes listed below, and assess each outcome in at least one assignment (how these outcomes will be addressed and assessed must be detailed in the CourseLeaf submission for the course), and
3. Focus primarily on at least one theoretical or conceptual area of mathematics, with the primary emphasis on promoting mathematical thinking through solving mathematical problems and constructing proofs, rather than on practical applications of mathematics in other fields.

Student Learning Outcomes

At the completion of a course fulfilling the Mathematics requirement, students should be able to:

- Demonstrate an ability to understand aspects of the world through a mathematical lens;
- Give examples related to course materials that show how creativity is central to mathematical thinking;
- Be able to demonstrate facility with core mathematical concepts by completing work at the introductory college level or beyond in one area of mathematics.

Catamount Core Requirements language submitted for Faculty Senate consideration in the Core Skills and Common Ground Values curricular areas (curricular areas 2 and 3).

These categories were approved at the May 2020 Faculty Senate Meeting and by the Board of Trustees. **The specific language of the following four requirements will be considered for a vote at the November Faculty Senate meeting: Quantitative and Data Literacy; Writing and Information Literacy Tier 2; Oral Communication; Global Citizenship (2 pathways).**

Curricular Area 2: Core Skills (9 credits)

3-credit Quantitative and Data Literacy Requirement

QD: Quantitative and Data Literacy

6-credit Communication Skills Requirement

FWIL: Foundational Writing and Information Literacy (Current requirement, not included)

Plus:

WIL2: Writing and Information Literacy Tier 2

or

OC: Oral Communication

Curricular Area 3: Common Ground Values (12 credits)

6-credit Diversity Requirement (current requirement; not included)

3-credit Sustainability Requirement (current requirement; not included)

3-credit Global Citizenship Requirement

GC: Global Citizenship, with two possible fulfillment pathways:

GC1: Global Systems and Problems

GC2: Developing Global Citizens

Quantitative & Data Literacy (QD) Requirement

Students are required to take one 3-credit QD course.

Courses cannot have both an MA (Pure Mathematics) and a QD designation.

Description

Since data analysis drives research in academic disciplines and decision-making in applied contexts, it is critical that students have experience manipulating and drawing conclusions from data sets. QD-designated courses demonstrate and apply quantitative approaches within a disciplinary context, ensuring that students are able to extract meaning from data-rich information and to apply appropriate analytical tools in assessing that meaning.

Approval Criteria for QD Courses

To qualify to fulfill the Quantitative and Data Literacy requirement, a course must:

1. Be at least 3 credits.
2. Include all three of the outcomes below and assess these outcomes in at least one assignment. How these outcomes will be addressed, as well as assessed, must be detailed in the CourseLeaf submission for the course.
3. Have a significant focus on data evaluation, analysis, manipulation, and presentation, with an emphasis on promoting critical thinking through the application of quantitative data analysis.

Student Learning Outcomes

At the completion of any course receiving the QD designation, students should be able to:

- Present data in a variety of ways, including analytical, graphical, and tabular.
- Interpret data, solve problems, and draw conclusions from data presented in a variety of ways, including analytical, graphical, and tabular, and communicate the thought processes involved.
- Evaluate data-rich information and determine whether the resulting conclusions make logical sense or support a given argument within the context provided.

Writing and Information Literacy 2 (WIL2) Requirement

Students are required to take one 3-credit WIL2 or one 3-credit OC (pg. 13-14) course.

Description

Courses that fulfill WIL2 will help students gain familiarity and fluency with genres, conventions, and formats typical in a discipline or field as well as develop a deeper understanding of how knowledge is accessed, developed, and shared. WIL2 courses build on skills and processes introduced in FWIL but refined through the conventions and practices of the field or discipline, including writing appropriately for different purposes, audiences, and contexts; posing and pursuing questions using relevant, reliable, and useful information while integrating and documenting sources correctly; understanding and evaluating ideas and evidence in texts; and developing flexible writing processes, including planning, drafting, revising, and polishing. Any approved WIL2 course will satisfy the requirement for any student. There is no requirement that WIL2 courses be completed in a student's major, and there is no restriction on the language of instruction for WIL2 courses.

Approval Criteria for WIL2 Courses

Courses approved to fulfill the WIL2 requirement must:

1. include multiple opportunities for students to engage in writing/information literacy activities. Writing and information literacy should be tied to the course's outcomes. The application should make clear what role writing and information literacy activities play in the course.
2. include opportunities for students to make use of feedback in developing their work. The application should explain how feedback can help students develop learning over time. The intention of this requirement is that writing is not only assigned but also taught. In some courses, assigned drafts and revisions are the mechanism for the application of feedback. In other courses, feedback from one assignment may be applied to a subsequent one. The application should note what feedback mechanisms are embedded in the course and how the instructor will gauge the students' use of feedback.
3. derive a substantial portion of the semester grade from written assignments. The intent of this requirement is that writing and information literacy be a major and meaningful component of the course. The application (and syllabus) should not only note the weight of writing and information literacy activities/assignments in the semester grade, but also explain how the work assigned (in volume, in difficulty, in frequency) is substantial.

In addition, the course must address and assess student learning outcomes listed below.

Student Learning Outcomes:

- **Using Disciplinary or Field-Based Frameworks:** Students will apply disciplinary or field-based approaches to reading, writing and working with information, including being able to engage with debates or conversations central to the field and to communicate to a range of audiences, as appropriate for course materials and context.
- **Developing Flexible Writing and Inquiry Processes:** Students will develop the capacity to reflect on and improve flexible and iterative processes for writing, reading, and pursuing inquiry in a field or discipline
- **Using information ethically:** Students will use information ethically and with integrity, in terms of evaluating information for reliability and usefulness, crediting information sources, and understanding how information is generated and accessed in a discipline or field

Oral Communication and Information Literacy (OC) Requirement

Students are required to take one 3-credit WIL2 (page 11-12) or one 3-credit OC course.

Description

Oral communication refers to how speakers create and use messages to generate meanings across a wide variety of contexts and cultures. This includes the use of verbal and nonverbal communication practices. The oral communication general education requirement aims to enhance students' ability to speak and listen effectively and ethically. Students will develop effective speaking skills, including crafting messages that are appropriately adapted to purpose, audience, context, and occasion. In addition, students will gain proficiency in informational literacy, including understanding the ethical uses of information and how to find, use, evaluate, and appropriately cite relevant, reliable, and useful information. In addition, students will gain proficiency in practices of effective listening and the critical analysis of oral presentation. Furthermore, competency in oral communication will demonstrate students' abilities to understand and synthesize theories of human communication and how to utilize and apply these theories to crafting effective speaking and listening practices. Courses in this category provide students with an understanding of the form, content, effectiveness, and ethical dimensions of verbal and nonverbal communication; they are not required to be delivered in English.

Course Approval Criteria

Courses approved to fulfill the OC: Oral Communication and Information Literacy requirement must:

1. require at least three opportunities per course to develop and practice oral communication skills through a wide range of possible assignments.
2. include faculty-supervised and -evaluated oral presentations wherein at least 30% of the grade is based on oral presentation and listening.
3. provide as much opportunity as possible for students to practice and improve their oral presentations as well as opportunity to critique oral communication. For approval, the instructor should address how the course size and structure will enable sufficient practice for students to meet the outcomes.
4. emphasize listening as well as presentation skills.
5. emphasize information literacy.

In addition, the course must address and assess student learning in each of the learning outcomes listed below.

Student Learning Outcomes

- Demonstrate oral communication skills such as: appropriate selection of topic and materials; appropriate organization; effective presentation; the ability to adapt to audience, setting, and occasion
- Demonstrate critical thinking and problem-solving skills by discerning, describing and/or adapting to connections between audience, speaker, and occasion.
- Use information ethically and with integrity, in terms of evaluating information for reliability and usefulness, crediting information sources, and understanding how information is generated and accessed
- Listen effectively and critically evaluate orally presented information and arguments.

Global Citizenship Requirement

Students are required to take one 3-credit Global Citizenship course from either (GC1 or GC2) pathway.

The University of Vermont prepares students to live in an increasingly interconnected, diverse, and changing world. Global Citizenship courses help students understand the nature and implications of worldwide phenomena and challenges across local, national, regional, and cultural boundaries. Global citizenship courses also help students develop the skills they need to participate effectively and responsibly as citizens in our increasingly globalized society. To be effective, informed, and responsible members of a diverse and interconnected global community, students need to be able to effect change collaboratively, to communicate across cultural boundaries, and to think deeply and creatively about shared challenges, responsibilities, and injustices.

GC1 Pathway description: Global Systems and Problems

Courses that address systems and problems that are global in scope. These courses will help students understand the nature and complexity of global phenomena. They may address cultural, political, economic, ecological, artistic, technological, human health, or other aspects of our increasingly interdependent world. They explore both the unique problems and the opportunities created by such interdependence and interconnectedness.

GC1 Course Approval Criteria:

To be considered for meeting the GC1 pathway, a course must emphasize material (lectures, videos, readings, activities) and require significant student work (papers, exams, portfolios, etc.) that:

1. Address phenomena that are global in nature;
2. Address these phenomena through at least one of the following lenses: artistic, cultural, ecological, economic, educational, human health, political, or technological;
3. Explore the opportunities and challenges created by the interconnectedness and interdependence of global phenomena outlined in #1.

Student Learning Outcomes:

Courses approved for the GC1 must address and assess student achievement of at least two of the following learning outcomes:

- Students will understand major elements of global systems, including their historic and contemporary interconnections and the differential effects of human organizations and actions.
- Students will be able to plan, discern, and evaluate appropriate complex solutions to global challenges using multiple disciplinary perspectives (e.g., cultural, historical, or scientific).
- Students will be able to draw connections between worldviews, power structures, and experiences of multiple cultures in historical or contemporary contexts, as they apply to global challenges.

GC2 Pathway description: Developing Global Citizens

Courses that develop skills necessary to participate effectively as a citizen in local communities and the world at large. To be effective and responsible members of a diverse and interconnected global community, students need to be able to communicate across cultural boundaries, to think deeply and creatively about shared responsibilities and injustices, and to collaboratively effect change. The courses in this pathway are therefore designed to impart at least one of the following core skills: language proficiency, ethical reasoning, and civic engagement.

GC2 Course Approval Criteria:

To be considered for meeting the GC2 pathway, a course must emphasize material (lectures, videos, readings, activities) and significant student work (papers, exams, portfolios, etc.) that help students develop skills necessary to participate effectively as a citizen in local communities and the world at large. These skill sets can be in any of the following areas:

1. community and civic engagement
2. cross-cultural communication
3. ethical reasoning and decision-making
4. language proficiency.

Student Learning Outcomes:

Courses in the GC2 pathway address and assess student achievement of at least two of the following learning outcomes:

- Students will be able to analyze community contexts and community assets and identify and evaluate options for civic and social engagement.
- Students will demonstrate the ability to build relationships within community contexts and structures to further civic and social action.
- Students will be able to connect and extend disciplinary knowledge to active community engagement.
- Students can understand different philosophical approaches to moral reasoning and apply abstract moral concepts or theories to concrete ethical problems, be they problems in personal ethics, vocational ethics, or social and political morality. These will include ethical problems that are global in scope.
- Students can appreciate the moral complexity of difficult cases, understand how different approaches to moral reasoning yield different conclusions, and anticipate objections to their own perspectives drawn from other moral points of view.
- Students can demonstrate knowledge of a second language and an awareness of how language shapes culture.
- Students can demonstrate a complex understanding of cultural differences through verbal and nonverbal communication and can use this to broaden their perspectives on diverse ways of knowing and being.
- Students can recognize the influence of cultural norms, customs, and traditions on ways of knowing and/or being in the world and can use this understanding to inform their cross-cultural interactions.