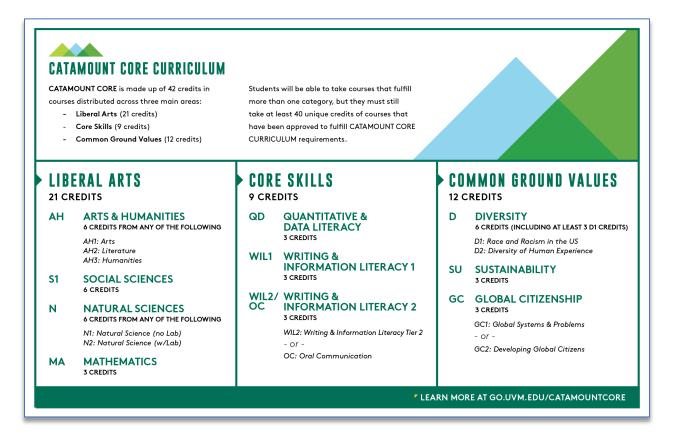


### Approval Criteria and Learning Outcomes for all Catamount Core Designations

(As amended by the Faculty Senate at their September 2022 meeting.) [Rev. 09/08/2023]



Please refer to the Catamount Core Curriculum section of the **2023**-**2024 edition of the UVM Undergraduate Catalogue** for lists of courses that fulfill each requirement.

Faculty wishing to submit courses for CCC designation should refer to the instructions found <u>here</u>.

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### Liberal Arts

### AH1: Arts

Arts focus on the understanding, analysis, and production of creative works in a variety of forms, including dance, multimedia, music, theater, visual arts, and creative writing, among others. (The analysis and interpretation of literary works is covered in the separate AH2: Literature requirement.) 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.

### **Approval Criteria for AH1: Arts**

### 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 at least *two* of the student learning outcomes listed below.

### **AH1: Arts Student Learning Outcomes:**

Students completing a course fulfilling the Arts 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: Literature

Literature focuses on the understanding and analysis of creative literary works. Classes use critical theories to examine the meanings, cultural contexts, and historical development of literary works. They enable students to recognize different literary traditions, examine individual literary works closely using appropriate methods, and think critically about literary works as they relate to different aspects of society and history, including the examination of practices and problems.

### Approval Criteria for AH2: Literature

### Courses must be meet at least *two* of these three criteria:

- 1. Introduce students to one or more forms, genres, and/or traditions of literary work.
- 2. Allow students to practice the analysis of literary works, in each case using methods appropriate to the form and disciplinary or interdisciplinary approach of the course.
- 3. Use critical thinking to examine literary 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 at least *two* of the student learning outcomes listed below.

### AH2: Literature Student Learning Outcomes:

Students completing a course fulfilling the Literature requirement will:

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

### AH3: Humanities

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.

### AH3: Humanities Course Approval Criteria: Courses must be at least 3 credits and meet at least *two* of the following criteria:

- 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 at least *three* of the student learning outcomes listed below.

### **Student Learning Outcomes:**

Student completing a course fulfilling the AH3: Humanities category, should be able to do *at least three* of the following:

- 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.

### S1: Social Science

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 wellbeing.

### **Approval Criteria and Outcomes:**

### S1 Social Science Course Approval Criteria:

# To qualify to fulfill the Social Science requirement, a course must be at least 3 credits and meet *three* of the following four criteria:

- 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.
- 4. Students *apply* social science approaches to the study of individual, group or institutional interactions to their understanding of specific cases, such as in a field study or similar applied contexts.

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

### N1: Natural Science (no Lab)

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.

### N1: Natural Science (No Lab) -- Course Approval Criteria:

<u>N1 courses must be at least 3 credits and meet *all three* of the following:</u>

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

### **Student Learning Outcomes:**

After completing an N1 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.

### N2: Natural Science (with Lab)

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. *N2 courses include a laboratory component*.

### N2: Natural Science (with Lab) -- Course Approval Criteria:

#### <u>N2 courses must meet *all six* of the following:</u>

- 1. Offer a total of at least three credits integrating scientific theory and practice, typically combining a lecture component and a lab component;
- 2. 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;
- 3. 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
- 4. Illustrate the use of appropriate theories and models to predict change in natural systems over time.
- 5. 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
- 6. Engage students in, and assess their understanding of, the scientific method through practical and written work.

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

### N2 Student Learning Outcomes:

After completing an 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.
- 4. Demonstrate understanding of the scientific method through practical and written work.

### MA: Mathematics

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.

### MA: Pure Mathematics Course Approval Criteria:

To qualify to fulfill the Pure Mathematics requirement, a course must be at least 3 credits and:

1. 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.

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

### **Student Learning Outcomes:**

At the completion of a course fulfilling the Pure 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.

### Core Skills

#### QD: Quantitative and Data Literacy

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.

### **QD:** Quantitative and Data Literacy Course Approval Criteria:

To qualify to fulfill the Quantitative and Data Literacy requirement, a course must be at least 3 credits and:

• 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.

In addition, the course must include all three of the outcomes below and assess these outcomes in at least one assignment.

### **QD 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 & Information Literacy 1

Courses approved to fulfill the WIL1 requirement must be at least 3 credits and should include assignments and activities to develop the following four learning goals: rhetorical discernment, information literacy, critical reading, and substantive revision. The course must address and assess all of the student learning outcomes listed below.

### Student Learning Outcomes:

- **Rhetorical Discernment**: The ability to write appropriately for different audiences, contexts, and purposes.
- **Information Literacy:** The ability to pose appropriate questions and find reliable, relevant, and useful information to answer them. Information literacy also includes the ability to integrate sources into writing and to document sources correctly.
- **Critical Reading:** The ability to identify, understand, and communicate the main ideas of a text and evaluate the evidence or strategies used to support those ideas.
- **Substantive revision:** Substantive revision requires approaching writing as a process that includes rethinking ideas and organization, not merely copyediting and correcting mistakes.

Students are required to take 1 WIL1 course, preferably during their first year at UVM.

### Writing & Information Literacy Tier 2:

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.

### **Approval Criteria for WIL2 Courses**

Courses approved to fulfill the WIL2 requirement must be at least 3 credits and:

- 1. Be designed for students who have completed the WIL1 requirement.
- 2. 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.
- 3. 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.
- 4. 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 all of the 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.

### OC: Oral Communication

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, listen, and interact with others 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 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. Courses are not required to be delivered in English; sign language courses that develop equivalent communication skills through a signed linguistic modality may also fulfill this requirement.

### **Approval Criteria for OC Courses:**

Courses approved to fulfill the OC: Oral Communication and Information Literacy requirement must be at least 3 credits and:

- 1. Require at least three opportunities per course to develop and practice oral communication skills through a wide range of possible assignments.
- 2. Emphasize faculty-supervised and -evaluated oral presentations.
- 3. Provide as much opportunity as possible for students to practice and improve their oral communication, as well as opportunity to analyze that of others. For approval, the instructor should address how the course size and structure will enable sufficient practice for students to meet the outcomes.
- 4. Emphasize comprehension as well as presentation skills.

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.
- Demonstrate critical thinking and problem-solving skills by discerning, describing and/or adapting to connections between audience, speaker, and occasion.

• Listen effectively and critically evaluate orally presented information and arguments.

### Common Ground Values

### D1: Race and Racism in the US

Courses in this category have as a primary focus race and racism in the United States as it pertains to ALANA populations. A D1 course must promote an understanding of:

- Race and racism in the U.S.
- The meaning of power and privilege

### **D1** Competencies

D1 courses focus on the topic of race and racism in the US in more than 75% of the course content (weekly topics, readings, assignments). Students completing these courses are expected to have developed at least three of the four following competencies:

- 1. *Awareness*. Develop an awareness of race and racism in the US at the individual or systemic levels including historical and/or contemporary issues.
- 2. *Knowledge.* Understand and contextualize foundational concepts, theories, histories, frameworks and/or methodologies regarding race and racism in the US.
- 3. *Analysis*. Analyze arguments, processes, and debates including multiple perspectives related to race and racism in the US.
- 4. *Application*. Demonstrate the ability to apply theoretical knowledge to recognize and name dynamics and/or problem-solve in specific cases related to race and racism in the US.

### D2: The Diversity of Human Experience

Courses in this category focus on expanding students' cultural awareness. A D2 course is intended to:

- Promote an awareness of and appreciation for the diversity of human experience in any of its forms including, but not limited to race, ethnicity, religion, socio-economic status, language, sex, gender identity, sexual orientation, age, and disability; and/or
- Foster an understanding of global and national issues including the histories, health, contexts, and flows of people, cultures, ideas, and capital or other resources within or across political and geographical boundaries.

### **D2** Competencies

D2 courses focus on the topic of the diversity of human experience in more than 75% of the course content (weekly topics, readings, assignments). Students completing these courses are expected to have developed at least three of the four following competencies:

- 1. *Awareness*. Develop an awareness of the diversity of individuals, cultures, communities and/or processes.
- 2. *Knowledge*. Understand and contextualize foundational concepts, theories, histories, frameworks and/or methodologies regarding the diversity of the human experience.
- 3. *Analysis*. Analyze arguments, processes, and debates including multiple perspectives related to the diversity of the human experience.
- 4. *Application*. Demonstrate the ability to recognize identity-related power dynamics at the individual, group, and/or systems levels and/or address diversity-related problems.

### SU: Sustainability

At the University of Vermont, we recognize that the pursuit of ecological, social, and economic vitality must come with the understanding that the needs of the present be met without compromising the ability of future generations to meet their own needs.

Topics and activities in Sustainability courses are designed to help students develop the following competencies:

- 1. *Knowledge* Students can have an informed conversation about the multiple dimensions and complexity of sustainability.
- *2. Skills* Students can evaluate sustainability using an evidence-based disciplinary approach and integrate economic, ecological, and social perspectives.
- **3.** Values Students think critically about sustainability across a diversity of cultural values and across multiple scales of relevance from local to global.
- **4.** *Personal Domain* Students, as members of society, can recognize and assess how sustainability impacts their lives and how their actions impact sustainability.

### GC1: Global Citizenship - Global Systems and Problems

GC1 courses 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: Global Systems and Problems Course Approval Criteria Courses must be at least three credits and meet all three of these 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; and
- 2. Address these phenomena through at least one of the following lenses: artistic, cultural, ecological, economic, human health, political, or technological; and
- 3. Explore the opportunities and challenges created by the interconnectedness and interdependence of global phenomena outlined in #1.

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

### **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: Global Citizenship – Developing Global Citizens

GC2 courses 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: Developing Global Citizens Course Approval Criteria:

To be considered for meeting the GC2 pathway, a course must be at least three credits and 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. Civic engagement
- 2. Cross-cultural communication
- 3. Ethical reasoning and decision-making
- 4. Language proficiency

### **Student Learning Outcomes:**

Courses in the GC2 pathway must be at least three credits and 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 engage 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.
- 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.