Communication and Critical Thinking

Communication and Critical Thinking are essential skills that underlie all university education. Focusing particularly on argument, courses in this area of General Education help students understand the general function of writing, speaking, visual texts, and thinking within the context of the university at large, rather than within specific disciplines. In addition to featuring the basic rules and conventions governing composition and presentation, Communication and Critical Thinking courses establish intellectual frameworks and analytical tools that help students explore, construct, critique, and integrate sophisticated texts.

Goals in Communication and Critical Thinking:

- Goal 1: Craft well-reasoned arguments for specific audiences.
- Goal 2: Analyze a variety of texts commonly encountered in the academic setting.
- Goal 3: Situate discourse within social, generic, cultural, and historic contexts.
- Goal 4: Assess the relative strengths of arguments and supporting evidence.

Foundations of Learning

Foundations of Learning courses follow and build upon Communication and Critical Thinking courses and are offered by individual departments and interdisciplinary areas in the Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities and Fine Arts. Foundations of Learning courses in the Natural Sciences and Quantitative Reasoning are divided into four categories: 1. Physical Sciences, 2. Life Sciences, 3. Laboratory, and 4. Mathematics and Quantitative Reasoning. Those in the Humanities and Fine Arts are divided into five categories: 1. Literature, 2. Art, Classics, Dance, Drama, Humanities, and Music, 3. History, 4. Philosophy and Religious Studies, and 5. Foreign Language. Foundations of Learning courses introduce students to the basic concepts, theories, and approaches offered by disciplinary and interdisciplinary areas of study. They provide the foundation to understand and approach problems in the academy, and in local and global real-world environments. Consistent with class size and learning goals, they cultivate skills in reading, writing, communication, computation, information-gathering, and use of technology. Where appropriate, courses intended as preparation for a major may also be designated as Foundations courses. Only lower division courses are designated as Foundations of Learning courses.

Explorations of Human Experience

Explorations of Human Experience courses are upper division courses which allow concentrated or thematic study. In Explorations of Human Experience there are three areas of study – Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities and Fine Arts. Among these areas are courses designated as cultural diversity courses. “Explorations of Human Experience” courses take the goals and skills of “Foundations of Learning” courses to a more advanced level. This may find expression in one or more of the following pedagogical elements: greater interdisciplinary, more complex and in-depth theory, deeper investigation of local problems, and wider awareness of global challenges. More extensive reading, written analysis involving complex comparisons well-developed arguments, considerable bibliography, and use of technology are appropriate in many explorations courses. Courses narrowly centered within one aspect of a discipline are more suited to major study than general education, which encourages students to relate their learning across the range of their educational experience. Explorations of Human Experience courses are upper division and cannot be used to fulfill this requirement if taken before students reach junior standing (passing 60 units).

Areas of Study In Foundations of Learning and Explorations of Human Experience

A. NATURAL SCIENCES AND QUANTITATIVE REASONING

Natural Sciences

Natural Sciences use the scientific process to study nature and represent an approach to the study of the universe and its natural laws and phenomena. Students achieve basic scientific literacy and thereby understand the scientific process including the value of observation, hypothesis testing, and experiments in the advance of science. Thus students require a general understanding of fundamental concepts and knowledge accumulated by the natural sciences. From that understanding, students develop an ability to reason about and follow new developments in the natural sciences, and to think in a scientifically informed manner about social and political issues that involve science and technology.

Goals for GE Courses in the Natural Sciences

- Goal 1: Explain basic concepts and theories of the natural sciences.
- Goal 2: Use logic and scientific methods to analyze the natural world and solve problems.
- Goal 3: Argue from multiple perspectives about issues in natural science that have personal and global relevance.
- Goal 4: Use technology in laboratory and field situations to connect concepts and theories with real-world phenomena.

Quantitative Reasoning

Quantitative reasoning refers to a range of academic capacities that includes learning from data, communicating quantitatively, analyzing evidence and assertions, and employing quantitative intuition. While quantitative reasoning is essential to sciences, other disciplines require the ability to use and comprehend quantitative language. To do this, students require the ability to analyze and interpret data in both scientific and social contexts. By possessing this set of mathematical and problem solving skills, students will be able to engage effectively in quantitative situations arising in life and work.
Goals for GE Courses in Quantitative Reasoning
• Goal 1: Apply appropriate computational skills and use basic mathematical concepts to analyze problems in natural and social sciences.
• Goal 2: Use methods of quantitative reasoning to solve and communicate answers to real-world problems.

B. SOCIAL AND BEHAVIORAL SCIENCES
The Social and Behavioral Sciences focus on human behavior, cognition, and organization from anthropological, economic, geographic, linguistic, political, psychological and sociological perspectives. Students gain an understanding of society and culture, as well as individual and social interaction processes. Disciplines within the Social and Behavioral Sciences employ the scientific method and utilize both quantitative and qualitative techniques to analyze the diversity and complexity of human experience. Through interdisciplinary learning, students explore the relationships between human societies and the physical environment.

Goals for GE Courses in the Social and Behavioral Sciences
• Goal 1: Explore and recognize basic terms, concepts, and domains of the social and behavioral sciences.
• Goal 2: Comprehend diverse theories and methods of the social and behavioral sciences.
• Goal 3: Identify human behavioral patterns across space and time and discuss their interrelatedness and distinctiveness.
• Goal 4: Enhance understanding of the social world through the application of conceptual frameworks from the social and behavioral sciences to first-hand engagement with contemporary issues.

C. HUMANITIES AND FINE ARTS
The Humanities and Fine Arts encompass works of the imagination, such as art, literature, film, drama, dance, and music, and related scholarship. Students better understand human problems, responsibilities, and possibilities in changing historical contexts and diverse cultures, and in relation to the natural environment. Students acquire new languages and familiarize themselves with related cultures. They gain the ability to recognize and assess various aesthetic principles, belief systems, and constructions of identity. Students acquire capacities for reflection, critique, communication, cultural understanding, creativity, and problem solving in an increasingly globalized world.

Goals for GE Courses in the Humanities and Fine Arts
• Goal 1: Analyze written, visual, or performed texts in the humanities and fine arts with sensitivity to their diverse cultural contexts and historical moments.
• Goal 2: Develop a familiarity with various aesthetic and other value systems and the ways they are communicated across time and cultures.
• Goal 3: Argue from multiple perspectives about issues in the humanities that have personal and global relevance.
• Goal 4: Demonstrate the ability to approach complex problems and ask complex questions drawing upon knowledge of the humanities.

Guidelines for Submitting a Proposal that includes General Education
1. Qualifications relevant to goals, capacities and areas of general education:
   Briefly state how your course fits into the level of Foundations or Explorations.
   • Identify the area of study of general education to which your course applies (e.g. Natural Science and Quantitative Reasoning, Social and Behavioral Sciences, Humanities and the Fine Arts) and describe how the goals for that section are addressed by your course. Provide specific examples of the coursework that best apply to each goal.
   • Identify three of the capacities for general education that are developed extensively in your course, providing specific examples of the coursework that best applies to each capacity and how you will assess student learning.
   • What forms of communication and information literacy will students learn in the course? State the approximate amount and kind of written work required, and how students will be required to access and evaluate sources of information.
   • Does the design of this course for General Education differ from how the course would be designed for majors? If so, how? If not, why does it serve both audiences?
   • If the course is being proposed to satisfy cultural diversity indicate how its content emphasizes non-dominant perspectives, cultures, views, and traditions.

2. Course syllabus to include the general education program description, student learning outcomes, required readings and work, grading standards, and evaluation procedures.
You may call the Office of the Dean, Division of Undergraduate Studies, the Chair of the Committee on General Education, or Curriculum Services for assistance.