

Proposed general education requirements

Committee on Educational Policy – February 2009

“Design” principles

Our requirements should...

- be easy to understand
- be less burdensome than current requirements, if possible
- be interesting (recruitment, retention)
- reflect faculty and student feedback
- reflect our campus’s principles and identity

High-level objectives

Highest level: to encourage lifelong learning, and to prepare people to handle the complex and unexpected problems of the future with wisdom and resourcefulness.

More concretely:

- 1) To provide students with a base of knowledge and skills that future learning can build on.
- 2) To expose students to a broad range of disciplines and methodologies, to better prepare them for a world of complex problems and rapid change.
- 3) To enhance the abilities of students to approach problems in appropriately analytical ways.
- 4) To prepare students to function as responsible and informed participants in civic life, considering pressing societal issues (such as the environment, the economy) productively and from a variety of perspectives.

Proposal

		Code	Distinct Courses	Possibly Overlapping
Cross-Cultural Analysis		CC	1	
Ethnicity & Race		ER	1	
Interpreting Media		IM	1	
Mathematical & Formal Reasoning		MF	1	
Scientific Inquiry		SI	1	
Statistical Reasoning		SR	1	
Textual Analysis & Interpretation		TA	1	
Perspectives (Choose 1)	Environmental Awareness Human Behavior Technology & Society	PE-E PE-H PE-T	1	
Practice (2-credit) (Choose 1)	Creative Process Collaborative Work Service Learning	PR-CP PR-CW PR-SL	+ (2cr)	
Writing	Composition	C1&C2	1	1
	Disciplinary Communication	DC	*	
Total (= 9+ to 10+)			9+	1

*CEP advocates building DC into existing major courses

Major differences from current system

- Smaller
- Almost no overlap (Exception: Core (usually C1))
- No Topical vs. Introduction distinction
- Categories follow from educational goals, not administrative divisions
- Writing-intensive → Disciplinary Communication

Current requirements

	Category	Code	Distinct Courses	Possibly Overlapping
Humanities & Arts	Intro Discip	IH	2	
	Topical	T	1	
Social Sciences	Intro Discip	IS	2	
	Topical	T	1	
Natural Sciences & Engineering	Intro Discip	IN	2	
	Topical	T	1	
Writing	Composition	C1&C2	1	1
	Writing-Int	W		1
Math	Quantitative	Q		1
Other	Ethnic / Non-Western	E		1
	Arts	A		1
Total (= 10-15)			10	15

Specific objectives of proposed requirements (Work in progress)

Cross-Cultural Analysis

Courses in cross-cultural analysis aim to prepare students for a world that is becoming a global village, with increased interaction and integration among peoples, companies, and governments. These courses aim to encourage a broader and deeper understanding of cultures and societies outside the United States. Such courses might focus on an in-depth examination of one culture, or one aspect of such culture (e.g., art, music, history, language). Alternatively, these courses might aim to help students develop skills of cross-cultural comparison and analysis. A third option is courses that explore topics that are inherently cross-cultural such as international relations or the processes of economic globalization. Whatever the approach, these courses all aim to help students develop the openness and sensitivity necessary for cross-cultural understanding. Although themes of privilege and oppression are centrally relevant to the history and current experience of many cultures, such themes may, but are not required to be, addressed in cross-cultural awareness courses.

Ethnicity and Race

Courses focused on issues of race and ethnicity aim to prepare for a state and a world which are increasingly multi-ethnic and multi-racial. Beyond familiarizing students with the culture and/or history of one or more ethnic or racial groups, these courses also aim to develop theoretical and practical understanding of questions such as (but not limited to): how categories of ethnicity and race are constructed; the role they can play in identity formation; how ethnicity and race have historically been used to justify forms of enforced inequality; and the contributions of people of various ethnicities to society and to political change. These courses are particularly concerned with how ethnicity and race may intersect with other categories, such as gender, class, or sexual orientation, to shape self-understanding and patterns of human interaction. While such courses may often adopt an historical perspective on the issues they consider, they will address discrimination based on ethnicity or race as an ongoing problem whose resolution remains an unfinished social task.

Interpreting Media

Contemporary life bombards us with visual and auditory media, often in the form of advertising or advocacy. Interpreting Media courses explore the complex ways in which information of all kinds is represented by visual, auditory, or kinesthetic means, or through performance. They build in-depth understanding of one or more forms of artistic media: media in which non-textual materials play primary roles. They offer skills in the practice, analysis, interpretation and/or history of one or more artistic media, as well as the ability to analyze the means by which these media encode and convey information.

Mathematical and Formal Reasoning

Disciplines such as mathematics, logic, and computer programming teach us to think with rigor and precision. In a world in which much thinking and discourse is directed by emotion and association, formal or mathematical models teach the value of dispassionate analysis. Courses in this category emphasize the development of mathematical, logical, and/or formal reasoning skills. Mathematics-based courses presuppose UC-level mathematics preparation, are focused on teaching significant problem solving skills, and are often oriented towards particular application areas. Other courses satisfying this requirement train students in formal reasoning skills and/or in the construction and use of formal models. Formal reasoning domains include mathematical proof, logic, and applied logic. Some examples of formal models are: computer programming languages, generative grammars (from linguistics), supply and demand models, and formal music theory.

Scientific Inquiry

Courses in Scientific Inquiry teach students about the essential role of observation, experimentation and measurement in the natural sciences. Students should acquire key concepts, facts, and theories relevant to living systems and/or the physical universe; by the end of the course they should also be able to articulate an understanding of the value of scientific thinking in relation to issues of societal importance.

Statistical Reasoning

In today's globalized, media-saturated information society, we are continually presented with – or asked to present – numerical data. With their emphasis on classical mathematics, our schools may not do enough to prepare citizens to interpret quantitative claims and make judgements in situations of statistical uncertainty. The goal of statistical reasoning courses is to teach skills for effective reasoning about and use of quantitative information. Students acquire an understanding of making informed decisions in the presence of *uncertainty*. Possible topics include ways of (mis)representing data; correlation vs. causation; statistical inferences; experimental design and data analysis; understanding orders of magnitude.

Textual Analysis and Interpretation

Even in our current multi-media world, the written word remains a major vehicle of communication. Many fields, from literature and history to law, government, and religion, depend heavily upon the understanding and interpretation of written documents. Textual Analysis and Interpretation courses have as their primary methodology the interpretation or analysis of texts. The aim of these courses is to develop higher-order reading skills and to train students how to read attentively, to think critically and analytically, to produce and evaluate interpretations, to assess evidence, and to deploy it effectively in their own work. These abilities are not only necessary for academic success, but also for full participation in civic life at every level.

Environmental Awareness

The interactions between people and the earth's environments are subtle, complex, and influenced by a variety of natural, scientific, economic, cultural, and political factors. Courses satisfying the Environmental Awareness requirement teach students about the complexity of particular ecosystems and/or people's interactions with nature so that they will better understand the environmental issues and trade-offs that are likely to arise in their lifetimes. Courses deal with one or more of the following topics: the study of particular ecosystems or environments; natural forces, processes, and their effect on ecosystems; climates, climate models, and climate change; evolution and adaptation to the environment; bio-diversity and/or the robustness of nature and its feedback mechanisms; how cultures relate to their natural environments; human efforts to create, preserve, and modify environments; management of natural resources (such as fossil fuels, forests and fisheries); issues of sustainability (such as sustainable agriculture or renewable energy); pollution and its effect on ecosystems; ecological impacts of non-native species and other ecological disasters.

Human Behavior

Courses in human behavior help students to prepare for a world in which many of the most pressing challenges (e.g., genocide, environmental degradation, poverty) are impacted by human thoughts, decisions, or practices. As well, they provide a kind of "owner's manual" for students to assist them in understanding themselves, their roles (e.g., parent, partner, leader), and their social groups (e.g., family, workplace, neighborhood, nation). These courses impart specific knowledge about some aspect of individual human behavior or the operation of human groups. As well, they are likely to provide an introduction to one or more specific methodologies, such as ethnography, longitudinal analysis, or experimentation. A central aim, however, is to help students appreciate that better solutions to problems (whether global or personal) can often be found by incorporating information about how humans think, feel, and act.

Technology and Society

Imparting a basic understanding of the dynamic technological society in which we live is an essential goal of academic institutions. The study of technology helps satisfy the need of society for knowledgeable people able to understand, participate, and guide the rapid technological advances that play such a vital role in our world. Technology and Society courses focus on understanding technological advances, how they are developed, and their impacts on society.

Collaborative Work

Students learn and practice strategies and techniques for working effectively in pairs or larger groups to produce a finished product. For example, students might learn specialized practical information such as how to use change-management software to monitor and manage changes initiated by multiple group members. Alternatively, they might learn basic information about leadership, teamwork, and group functioning, which they can incorporate into their own group process. What is common to all courses is that some instruction regarding the process of collaboration is provided, in addition to instruction specific to the academic discipline and the products being produced.

Creative Process

Creative Process courses teach creative process and techniques in a context of individual or collaborative participation in the arts, including creative writing. Courses may combine theory and experiment in the creation of a new artwork, or new interpretation(s) of an existing artwork. CP courses include studies in individual or group creativity or improvisation, and/or ensemble rehearsal and performance. Students who elect to satisfy the CP requirement will take at least two credits of individual or group creative work. CP may be satisfied within courses of greater than two credits. Where appropriate, sponsoring units may require a sequence of two or three 2-credit courses, with the CP designation assigned to the final quarter.

Service Learning

Service learning courses provide students with an opportunity to integrate their academic coursework with community involvement. Such courses support students in learning to reflect on, communicate, and integrate principles and theories from the classroom in real-world settings. Students gain valuable practical skills while giving back to the community.