University of Massachusetts Boston

DISTRIBUTION AREA DESCRIPTIONS AND CRITERIA FOR COURSE CONTENT
IN DISTRIBUTION COURSES (Revised 2006)

The following four major domains of knowledge were delineated under the General Education guidelines approved by the University of Massachusetts Boston Faculty Council in 1998 and amended in 2006: Arts and Humanities, Social and Behavioral Sciences, Natural Sciences and Mathematics/Technology, and World Languages and Cultures. Courses approved for Distribution credit meet the course content criteria described below for one of these domains. Each college requires a different array of specific knowledge areas, including in some cases specific courses, to meet its own Distribution requirements.

Arts and Humanities

The Arts and Humanities investigate human concerns, ideas and experience, as well as the multitude of creative productions through which humanity seeks to express itself. Students taking courses in the Arts and Humanities will develop a better appreciation of the ways in which the aesthetic, moral, intellectual and spiritual aspects of the human condition have been and may be articulated. They will also gain understanding of humanistic methods of inquiry, which include historical research and the analysis and interpretation of ideas and symbolic expression. Courses in the Humanities examine philosophical, historical and literary materials, in order to shed light on the human values and goals which underlie them. Courses in the Arts focus on the creative process in such diverse expressive areas as architecture, literature, music, painting, sculpture and theater, in order to promote an understanding of how artists perceive their universe and their place within it.

Criteria for Distribution Courses in Arts and Humanities:
1. All courses that meet the Arts and Humanities distribution requirement must provide students with significant opportunities
   - to investigate a variety of ways in which aesthetic, moral, intellectual and/or spiritual aspects of the human condition are articulated, and
   - to understand such humanistic modes of inquiry as historical research and analysis and interpretation of texts, ideas, and symbolic expression.
2. Courses given the Humanities designation must devote substantial attention to assisting students to identify and explore the values which underlie philosophical, historical, and/or literary expression.
3. Courses given the Arts designation must lead students to examine expressive modes and formal structures of at least one major area of artistic endeavor, such as literature, architecture, music, painting, sculpture, or theatre.

Social and Behavioral Sciences

The Social and Behavioral Sciences investigate the institutions, practices and principles that define human activities. Such activities occur in contexts that range from intimate associations among family and friends to the global reach of economic markets or legal conventions. Courses in Social and Behavioral Sciences will help students gain a scientific understanding of these phenomena, and the bases for reaching intelligent decisions as actors with respect to them.

Criteria for Distribution Courses in Social and Behavioral Sciences:
1. The primary focus of the proposed course must be on human behavior, including the multiple mechanisms and social structures through which that behavior is influenced. The influences studied may be at any level of analysis, from the molecular to the economic and cultural.

2. The focus on behavior must be attained through the lens of scientific procedures, i.e., systematic observation integrated with the development of theory.

<u>Natural Sciences and Mathematics/Technology</u>

Courses in the Natural Sciences offer students the opportunity to learn how the laws of the physical world are derived and tested through observation, theory, and experiment. Students will gain an understanding of the correctable nature of scientific knowledge and the increasingly important interconnections among science, technology, and social concerns.

Courses in Mathematics will present methods, principles and patterns of thought that are used to study mathematical and logical systems. Students will gain some insight into how the aesthetics of mathematical analysis and its practical uses extend our understanding of human thought and the real world in which we function.

Courses in Technology engage students in the study and application of principles, methods, and practices involving computing and information technology. They provide students with an opportunity to move from being simple consumers of technology to producers and contributors of both knowledge and technology.

Criteria for General Education Distribution Courses in Natural Sciences:
1. Each course should have natural science content as a central focus.
2. Each course should have a hands-on, inquiry-based component, so that students actually engage in the process of investigation. This component would not necessarily take the form of a traditional, weekly, experimental laboratory; "inquiry" experiences might also be developed, for example, through take-home experiments, visits to museums or other field sites with specific objectives, data analysis, computer-based experiments, or brief in-class experiments. The course should be designed to provide experience in scientific inquiry, analysis, and problem-solving.
3. The course should engage students in reflection on the relevance and value of science to society and/or culture, as well as to the uses and abuses of scientific understanding and investigation.

Criteria for General Education Distribution Courses in Mathematics/Technology (courses in this Distribution area should meet either the Mathematics or the Technology criteria specified below):

A. Mathematics
   i. A significant part of the course should be aimed at the mastery and/or application of mathematical principles (i.e., doing mathematics).
   ii. The course should promote mathematical thinking and inquiry. To this end, the course should regularly require students to explain their reasoning and apply mathematical principles. Students should also be asked to make conjectures and explore and analyze mathematical problems.
   iii. The course should foster an appreciation of the value of mathematics, whether it be practical, aesthetic, or intellectual.

B. Technology
   i. The course should have computing and information technology content as its main focus.
   ii. The course should develop students' competency in the critical practice of technology in order to further knowledge, advance real-world applications, or enhance creative expression.

iii. The course should engage students in an examination of the ethics, rights and responsibilities of decision-making within the digital domain.

World Languages and Cultures

Learning a World Language enables students not only to communicate with and understand other individuals but also to appreciate the culture and artistic expressions of another people, whether past or present. In addition, by developing cognitive awareness of the structures of language and of the wide variety of ways thought or conception can be expressed in words, courses in world languages enhance students' verbal reasoning capacity, communication and critical skills, and appreciation of the power of language in general.

Courses in World Cultures invite students to examine culture as a vital framework for thought and action. The study of culture includes consideration of the linguistic, social and cognitive contexts of literature, the arts, oral tradition, religion, politics, family structure, and other aspects of human communities. World Cultures courses look at these subjects from a comparative perspective. They focus particularly on developing students' awareness of ethnocentrism and of the dynamic nature of cultures.

Criteria for Distribution Courses in World Languages:

All introductory, intermediate and advanced world language courses, whether classical or modern, may be counted in the World Language Distribution area. These courses may concentrate either on the language itself or on literature or culture, as long as the course materials are in the target language.

Criteria for Distribution Courses in World Cultures

Courses that meet the World Cultures Distribution Requirement must
1. Include explicit consideration of at least one of the following topics: meanings of culture, relationships between language and culture, concepts or processes of cultural change. In treating these topics courses should make students aware of the problems arising from ethnocentrism.
2. Include explicit focus on comparison between or among cultures. Students should be actively engaged (through writing, discussion, or other appropriate experiences) in identifying and understanding features of cultures other than their own (e.g., literary and artistic production, religious and mythic traditions, family structure, politics, economic behavior, adaptation to environment, both natural and human).

GUIDELINES FOR CAPABILITIES INSTRUCTION
IN DISTRIBUTION COURSES (Revised 2006)

Distribution Courses should address at least two general education capabilities, aiming at mid-level competence as appropriate for the discipline. The following guidelines for proposers and reviewers of Distribution Courses have been approved by the Faculty Council General Education Committee and are drawn from work done by various faculty general education committees over the last few years. These guidelines should be viewed as advisory rather than definitive or prescriptive. They are intended to provide guidance as to strategies which have been found successful by many faculty and to suggest the level of attendance to general education capabilities that the reviewers expect to find in successful Distribution proposals.

Distribution Courses must provide in-class instruction and practice in <u>two</u> of the following capabilities (NB: while we encourage class work on additional capabilities, course proposals must provide detailed evidence through assignments or other descriptive materials on how two capabilities are being addressed):

1. <u>Verbal Reasoning, (Critical Thinking):</u>

<u>Recommended criteria for inclusion as Distribution Course:</u>
1. Explicit attention to verbal reasoning or critical thinking as defined for discipline or course. This means spending at least part of one class session discussing what critical thinking means in the context of the course. Critical thinking and verbal reasoning in Distribution courses also involve some awareness that disciplinary frameworks and methodologies structure knowledge in particular ways.
2. Guided activities and assignments that ask students to practice and demonstrate verbal reasoning in ways appropriate to the distribution area and the course.

<u>Suggestions for pedagogical techniques and strategies:</u>
   Activities and assignments might include those which as students to do the following:
- Assess the reasonableness of ideas; analysis and evaluate arguments; generate and testing hypotheses; access, evaluate and use evidence; taking and defending a position. (These activities reflect and rely on traditional elements of logic: identifying ambiguous language; recognizing common faults in thinking; distinguishing between fact and opinion and between factual claims and value claims; drawing, recognizing and evaluating inference.)
- Demonstrate awareness of how historical, cultural and social contexts define issues and affect their representation; develop critical self-consciousness concerning the cultural embeddedness of moral and social problems, the contested nature of culture itself, the need to acknowledge differing points of view, the role of beliefs and emotions in moral and other choices.
- Demonstrate an understanding of the concepts and terminology used in analysis and interpretation, as appropriate to the discipline, as well as an increasing ability to apply such concepts. To begin to think critically in an arts course, for example, students would need an understanding of the formal structure of a work of art and the techniques and terms used to analyze it as such, as well as knowledge of the historical, social and formal contexts. They would learn to make meaningful connections between form and content. Similarly, in the social science area, students would learn how to identify and apply relevant categories and structures

to social phenomena as a way of organizing knowledge, perceiving patterns, making comparisons and gaining insight. Critical thinking instruction in the natural sciences might expose students to the principles of scientific method through such practices as generating and testing hypotheses, asking questions, designing experiments, making careful observations, drawing and evaluating conclusions.

2. **Quantitative Reasoning:**

Recommended criteria for inclusion as Distribution Course:
Any course which qualifies as a Mathematics Distribution Course (i.e. meets the relevant Area Criteria) automatically fulfills the quantitative reasoning capability. Course in other Distribution areas may meet the quantitative reasoning capability guidelines by including:
1. Explicit attention to understanding and critical analysis of quantitative information and its modes of presentation.
2. Practice in understanding the application of quantitative methods appropriate to the Distribution Area and discipline of the course.

Suggestions for pedagogical techniques and assignments:
- Integration of technology (such as graphing calculators or statistical software) into the course as a tool for visualizing, synthesizing, and analyzing quantitative data.
- Frequent exposure to real-world problems, appropriate to the discipline.
- Regular practice in analyzing quantitative data and expressing conclusions in a variety of verbal, graphic, and formulaic modes.

3. **Critical Reading and Analysis:**

Recommended criteria for inclusion as Distribution Course:
1. Explicit attention to critical reading in the context of the area, discipline or course. This means devoting class time to a discussion of reading strategies helpful in the course.
2. Regular assignments to read, analyze and discuss a variety of texts appropriate to the discipline and Distribution area. Courses that assign readings from just a single textbook will need to demonstrate how these assignments provide students with sufficient preparation to analyze disciplinary readings beyond this class.

Suggestions for pedagogical techniques and assignments:
- Explicit attention to various techniques involved in decoding written texts (e.g. making use of all features of the document; applying techniques such as skim, review, etc.; learning to use dictionaries and other appropriate aids.)
- In-class demonstrations of techniques of summarizing, paraphrasing, etc., followed by assignments which encourage practice of these techniques.
- Ample classroom discussion of assigned texts, to include identifying important ideas or themes; differentiating between main ideas and supporting evidence or examples; and calling attention to issues such as variety and purpose of writing, intended audience and point of view.
- Use of small groups to practice the skills of identifying and articulating main ideas, supporting details, kind of writing, intended audience; and to compare different texts.

- Use of reader-response essays.
- Use of reading journals and note-taking exercises.
- Frequent brief quizzes to reinforce careful reading of assigned texts.

4. Effective Communication (writing, speaking, or other forms of expressive communication). Demonstrate how your course will address one or more of these communicative forms.

Recommended criteria for inclusion as Distribution Course:
1. In-class instruction and discussion of written, spoken, or other forms of expressive language, especially those developed in the creative arts, as communication modes. In writing, instruction would include correct citation practice for the distribution area or discipline, as well as more substantive matters of written expression. In the creative arts, instruction would include visual, physical, or auditory language, such as form, balance, composition.
2. In writing, at least two graded expository written assignments of 3 – 10 pages in length for a total of at least 10 typed pages, double-spaced. It is strongly recommended that at least one of the formal papers should be suitable for submission as a Writing Proficiency Portfolio Essay, i.e., an expository essay of five pages or more, requiring comparative discussion of two or more texts or sources. In the creative arts, at least two major projects with an accompanying written or oral defense, including critical analysis. For courses emphasizing oral communication, two formal oral presentations credited toward the grade.
3. Detailed commentary and feedback on graded writing, oral presentation, or creative project.

Suggestions for pedagogical techniques and assignments:
- Informal practice in writing (journals, in-class response writing).
- Use of peer-review for papers, presentations, and projects.
- Suggested modes of oral practice include debates, panel discussions, group discussions, role-playing exercises. Ask students to analyze the strengths and weaknesses of another speaker's formal presentation.
- Opportunity for guided revision based on instructor's and/or peer review. In the creative arts, such opportunities for improvement in composition or performance skills would entail the use of a formative critique.

5. Using Technology to Further Learning:

Recommended criteria for inclusion as Distribution Course:
Any course which qualifies as a Distribution Course in Technology automatically fulfills the Use of Technology capability. Courses in other Distribution areas may meet the Use of Technology capability by including and using content that:
1. Explicitly discuss how technology is used to further learning in the course and, more generally, in the discipline or Distribution Area.
2. Provides instruction and assignments designed to develop students' familiarity and skill using appropriate technology.

Suggestions for pedagogical techniques and assignments:
Activities and assignments that accomplish at least three of the following goals:

- Demonstrate knowledge of concepts, practices, and techniques of computing and information technology.
- Provide an orientation toward real world applications and issues within the current technological environment.
- Demonstrate an ability to analyze, interpret, understand, decide, and use technological information within the field of inquiry.
- Discuss how technology is used to further learning in the course and, more generally, in the discipline or Distribution area.
- Provide instruction and assignments designed to develop students' familiarity and skill using appropriate technology.

6. **Collaborative Work:**

Recommended criteria for inclusion as Distribution Course:
1. Explicit in-class explanation of how collaborative work will be practiced and evaluated in the course, and of what the goals and criteria for evaluation of team projects will be.
2. At least one formal assignment credited toward the course grade requiring collaborative work as well as analysis of the process and its results by the participants.

Suggestions for pedagogical techniques and assignments:
- Assignments that place students in goal-oriented small-group settings with distinct individual roles to play (facilitator, note-taker, leader, etc.)
- Role-playing to elicit in-class analysis of some of the kinds of small-group behavior that promote or interfere with group learning.
- Written exercises, journals, or discussions which encourage reflection on team-work experiences and analysis of factors that make for successful cooperation.
- Creative assignments that can only be completed successfully with the participation of every group member (e.g. group research or analysis reports in which each member is responsible for a specific section; panel presentations or debates with distinct parts assigned to each person).