University of Maine

General Education Requirements

IMPLEMENTATION GUIDELINES

(Updated May 14 .1996. Please discard all previous copies.)

Beginning in September, 1995, all students initiating their baccalaureate programs at the University of Maine will be required to meet certain general education requirements that apply uniformly to all students, regardless of program. Additional general requirements may be imposed by individual colleges, and each academic major imposes requirements specific to that discipline.

The General Education Requirements cover six broad areas, listed below.

SCIENCE

Students are required to complete two courses in the physical or biological - sciences. This may be accomplished in two ways:

1) By completing two courses with laboratories in the basic or applied sciences;
2) By completing one approved course in the applications of scientific knowledge, plus one course with a lab in the basic or applied sciences.

DEFINITIONS AND EXPLANATIONS

1) A laboratory course in the applied physical or biological sciences brings basic knowledge to bear on the solution of practical problems in engineering, medicine, agriculture, forestry, and other fields for which natural science forms the foundation. Normally applied science courses require one of the basic natural sciences (biology, physics, chemistry, geology) as a prerequisite, and carry at least 4 degree credits.
2) A course in the applications of scientific knowledge has the following attributes:
    a) it focuses on one or more basic or applied natural sciences
    b) it includes significant blending of presently accepted science with its application in common situations;
    c) it discusses both the applications and limitations of the relevant scientific methodology;
    d) it includes as a major component of the course the observation of natural phenomena coupled with the gathering of data and its quantitative analysis, and its interpretation in an expository format;
    e) its overall focus is on guiding students towards the scientific literacy necessary for modern life rather than on training future science professionals.

MATHEMATICS

Students are required to complete at least six credit hours in mathematics, including statistics and computer science. No more than three of the six credit hours may be in computer science.

DEFINITIONS AND EXPLANATIONS

A course in the Mathematics category (which includes statistics and computer science) must satisfy at least one of the following criteria:

a) it focuses upon mathematical theory and/or applications;

b) it focuses on the logical structure and development of statistical methods, or on their application to data evaluation within a particular discipline;

c) it focuses on mathematical logic and analytical thinking; or

d) it emphasizes the principles that underlie the operation of computers or the design of the software that controls them.

HUMAN VALUES AND SOCIAL CONTEXT

Students are required to complete 18 credits in this broad area, selected from lists of approved courses to satisfy each of the six sub-categories listed below. (Courses that satisfy requirements in more than one sub-category may be counted in each appropriate sub-category.)

1) Western cultural tradition
2) Social context and institutions
3) Cultural diversity and international perspectives
4) Population and the environment
5) Artistic and creative expression

DEFINITIONS AND EXPLANATIONS

1) Courses included in the Western Cultural Tradition category have as their primary focus the historical and/or philosophical examination of the basis of Western culture. Courses may be discipline specific [e.g., the history of economic thought, the history of education] while others may touch on subjects [e.g., the Platonic or Aristotelian traditions] that cut across disciplinary boundaries. Subject areas may include, but are not limited to, artistic, economic, educational, historical, linguistic, literary, performative, philosophical, political, rhetorical, scientific, and social dimensions of the Western cultural tradition.

2) Courses included in the Social Contexts and Institutions category focus upon the ways in which social contexts shape and limit human institutions (defined broadly to include customs and relationships as well as organizations). The specific focus may be upon ways in which social contexts and institutions interact with human values, the role of institutions in expressing cultural values, or the social and ethical dimensions attendant upon particular academic disciplines.

3) A course included in the Cultural Diversity and International Perspectives category satisfies one or more of the following criteria:

    a) it places primary emphasis on the experiences, perspectives, and cultural work of one or more groups who are not dominant within a particular culture;

    b) it has as a primary goal encouraging students to become aware of the diversity of American culture and to discover their roles within that diversity; or

    c) it places primary emphasis on the relationships among or within different cultures in the past or present.

    d) it introduces students to a culture other than their own through an intermediate or advanced course in the language of that culture.

4) Courses included in the Population and Environment sub-category help students to understand how humankind interacts with our finite physical and biological environment. This understanding will be best achieved by a highly interdisciplinary approach that brings together aspects of the natural sciences, the social sciences, and the humanities. Although the technical solutions to environmental problems will be based upon scientific knowledge, the goals to be set and the ethical, political, economic and social dimensions of meeting them are the domain of the humanities and social sciences, which therefore must constitute a major focus of the course.

    Courses fulfilling this requirement should address the following:

    a) the role of both local and global environmental change on the quality of human life;

    b) the pervasive role of human population growth on environmental quality and the quality of life, both in industrial and developing countries;

    c) the influence of cultural, religious, economic, educational, and political factors on population growth and environmental quality;

    d) possible solutions to the population/environment problems, which may include tile role of technological advancements, a reexamination of educational and political institutions, enlightened reassessment of traditional religious and economic conceptions, and rethinking of the contemporary Western conception of "the good life".

5) Courses included in the Artistic and Creative Expression category engage tile student in creative thinking and processes. A primary objective is to develop skills and intellectual tools required to make artistic and creative decisions, and to participate in, evaluate, or appreciate artistic and creative forms of expression.

ETHICS

Students are required to take a course or a series of courses placing substantial emphasis on discussion of ethical issues. (This requirement becomes effective on September 1, 1996.)

DEFINITIONS AND EXPLANATIONS

The ethics requirement can be satisfied by 1) a stand-alone course in which ethics constitutes a substantial focus of the course, or 2) by a well defined series of courses required in a particular curriculum, wherein the treatment of ethics in any one course may be somewhat less, but which taken together sum to a substantial emphasis on ethics.

1) Courses that satisfy the ethics requirement have one or more of the following attributes:

    a) they teach methods of ethical analysis;

b) they deal intensively with ethical issues associated with a particular discipline or profession;

c) they engage the student in the study of ethical questions arising through the interpretation of literature or history, or social scientific analysis designed to include ethical evaluation. [In order for a course to be approved under this criterion, the treatment of ethics must be substantial rather than merely incidental. Examples: i) a course in history that focuses strongly on the ethical issues raised by a particular policy, e.g. colonialism, and the ways in which those issues were addressed or ignored, might be appropriate; ii) a course in econometrics typically would not count, but an economics course broadened to include questions of distributive justice could; iii) a course on psychophysics might not count, but a course on moral development could.]

2) Programs that undertake to integrate the treatment of ethics throughout the required curriculum may submit to the General Education Committee (GEIC) evidence that the program overall meets the Ethics requirement. The GEIC may thus approve a program (for a fixed period of time, subject to regular review) as an alternative to requiring that each student's curriculum contain specifically approved courses.

DEMONSTRATED WRITING COMPETENCY

Students are required to write throughout their academic careers and must demonstrate competency both at the introductory level and within their majors. To fulfill this requirement, students must:

1) Complete ENG 101, College Composition, with a grade of C or better, or be excused from this course on the basis of a placement exam.

2) Complete at least two writing-intensive courses, at least one of which must be within the academic major.

DEFINITIONS AND EXPLANATIONS --

In a writing-intensive course:

a) students must have an opportunity to revise their writing in response to feedback from the instructor;

b) a substantial portion of the student's final grade must be based upon the quality of the written work, and

c) course enrollment should normally be limited to 25 students or less.

CAPSTONE EXPERIENCE

Students are required to complete an approved capstone experience within the major by the end of their. senior year. The approved experience must be one in which the student draws upon and integrates the formal components of his or her undergraduate education to perform at a professional level. Students should consult closely with their academic advisor within the major program to explore the range of options available for meeting this requirement.

DEFINITIONS AND EXPLANATIONS

The capstone experience should have the following attributes:

d) the experience must be of significant depth and require innovation, creativity, reflection and synthesis of prior learning;

e) the experience must result in a thesis, report, presentation or performance that demonstrates mastery of the subject matter;

f) faculty/student interaction should be an integral part of the experience.

g) minimum student effort in the capstone should reflect the equivalent of three credits of work.

Interdisciplinary experiences and opportunities for group participation in the capstone experience should be encouraged.