

College of Arts and Sciences
General Education Guide for Area VII, Natural Science and Technology:
Applications and Implications

Course prefix & number: _____

Course Title: _____

Criteria Applicable to All Courses	
1. Does the course further the goals of general education articulated in the General Education policy? (see p. 2)	
2. Is the course a 500-level course? (500-level courses do not count towards general education.)	
3. Is the grading and amount of work as rigorous in this course as it would be for majors in the program, yet keep it open for nonspecialists?	
4. Does the syllabus detail course content, amount of student work, and grading procedures?	
5. If the course has multiple sections, do all sections meet the standards of general education and are they comparable with one another?	
6. Is the course a multiple topics course? If so, are the topics included?	
8. Has the course been offered at least once every two years?	
9. Is the course more than three credit hours? If so, has the department provided justification for the additional credit?	

Criteria Specific to Area VII	
A substantial portion of the course work must be devoted to the teaching of the relevant science and technology. Techniques and skills acquired without learning an underlying natural science do not meet this criterion.	
The courses should also explore the costs and benefits of society's decisions regarding the uses of the sciences they teach.	
A substantial portion of the course should prompt reflection on responsible choices between competing values and interests.	
Although courses will contain a core of natural science, computer science, or the technology based on these sciences, they will explore practical applications and implications by examining some of the following: <ul style="list-style-type: none"> ▪ sciences relevant to informed judgment about social and environmental costs and benefits; ▪ salient history of science and technology; ▪ assessments, systems analyses, and other quantitative tools; ▪ considerations of law, rights, ethics, and the political process; ▪ global challenges (e.g., population growth, climate and atmospheric change, loss of biodiversity, and resource management) involving more than one science and technology; or ▪ content from the social and behavioral sciences, humanities, and fine arts. 	
<i>Courses in this area lend themselves to a multi-disciplinary approach, and may be the sole responsibility of individual instructors with wide competencies, or may be team-taught, or may be offered by a group of instructors, each assuming responsibility for a module of the course.</i>	

Comments

Goals of General Education

A bachelor's degree should signify that the individual to whom it is granted has had a broad and balanced education, as well as concentrated studies in at least one discipline or area of knowledge. It should also signify that the individual has acquired intellectual skills that are applicable across a wide range of endeavors, as well as those narrower skills appropriate to a specialization. Thus the University requires structured plans of study leading toward both a specialized and general education.

Specialized education—the primary objective of concentrated study in majors, minors, and curricula—normally restricts the scope of concern in order to ensure a detailed, specific competence in techniques and subject matter. It seeks to accomplish these ends through a program of study comprising a number of segments (courses) taught by specialists and planned to contribute to the whole; the intended result is a person with particular information and a set of skills and abilities usually shaped by specific job demands and descriptions. Often the goals of specialized education are determined or strongly influenced by external agencies, e.g., accrediting bodies or professional field demands, as much as by stated goals of the University.

General education, on the other hand, is concerned with the breadth and balance of learning, and with the versatility that comes with proficiency in intellectual skills that have universal application. General education should develop each student's knowledge, capacity for expression and response, and critical insight to help the student become a capable, well-informed, and responsible citizen of a culturally diverse society in a complex world. To this end, the University's general education program aims to improve the student's competence in mathematics and language, both oral and written, and to foster the will and ability to think clearly, critically, reflectively, and with as much precision as the subject allows. While requiring a degree of proficiency from everyone, the University's general education program enables a student to master foundational intellectual skills through a sequence of related courses.

General education also seeks to extend the undergraduate learning experience beyond particular academic or professional concentrations. It aims to acquaint the student with essential subject matter and methods of knowing in the arts and humanities, the social and behavioral sciences, mathematics, and the natural (including applied) sciences. Moreover, it aims to enable the student to use technology appropriately, and to understand the value of individual health, fitness, and well-being. These aims are based on the belief that such learning enriches human experience and fosters understanding of oneself, others, and the world.

Note: The above statement is taken directly from the University General Education Policy