
GENERAL EDUCATION

GENERAL EDUCATION REQUIREMENTS

Every student seeking a bachelor's degree must take a substantial proportion of coursework designed to develop professional competence. In addition, students must develop the knowledge, skills, and understanding which will enable them to function as intelligent and creative members of a community. To enable students to achieve these goals, the university offers an integrated program of curricular and co-curricular activities organized to provide an educational experience suited to the needs of the individual.

Under the provisions of Title 5 Education of the California Code of Regulations, the university offers a variety of courses in general education. The pattern of courses included in the program is designed primarily to insure that students:

- develop the ability to express themselves effectively in both written and oral communication and in critical thinking which includes consideration of common fallacies in reasoning;
- understand nature and are able to relate to their biological and physical environment;
- are familiar with their own and the cultural heritage of others and have developed the capacity to be creative and to appreciate creativity in others;
- understand the economic, political, technological, and social problems of contemporary society and the responsibilities and privileges of modern citizenship;
- acquire a basic understanding of the requirements of good health and are able to maintain their own physical well being;
- have developed an understanding of themselves and their relationship to others.

Students in curriculum years 2001/02 and 2002/03 must satisfy all GE content areas with a minimum of 68 quarter units including 12 units of upper division synthesis courses. This total number of GE units represents a variance from Title 5 that has been approved by the CSU Chancellor's office as a special deviation for this university. The normal requirement in Title 5 for general education is 72 quarter units.

Since general education is under continued on-going review, the framework, guidelines, and coursework approved to meet these requirements may change from one catalog cycle to another. Therefore, students who change majors or otherwise have a break in status may find that they are subject to new degree requirements. Careful academic advising by faculty is essential.

Twelve quarter units of the total general education program must be completed in residence at California State Polytechnic University, Pomona. Courses developed by departments to satisfy the 12-unit upper-division requirement must be offered on a regular, yearly basis. If courses are not offered on a regular, yearly basis, the Office of Academic Programs has the authority to delete them automatically from the approved list.

No department may require coursework to meet the 12-unit upper division requirement unless those courses have gone through full curricular review, including Academic Senate approval. Departments may not establish deviations or modifications to the approved campus-wide general education patterns unless submitted through the complete consultative process, which requires final review by the CSU Chancellor's Office pursuant to Section 40405.5b of Title 5, California Code of Regulations.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

Section 40405.2 of Title 5, California Code of Regulations, specifies that California State University campuses shall accept certification of the fully completed Intersegmental General Education Transfer Curriculum as meeting all of the lower division general education requirements for the baccalaureate degree. The 12-unit upper-division requirement should be completed at the CSU campus.

This section applies to California community college students who transfer to a California State University campus on or after the start of the 1991-92 academic year.

RECIPROCITY BETWEEN THE CSU AND THE UNIVERSITY OF CALIFORNIA

Section 40505.3 of Title 5, California Code of Regulations, specifies that students transferring to the California State University from campuses of the University of California may satisfy California State University general education-breadth requirements for the bachelor's degree through satisfactory completion of all lower division general education requirements of a University of California campus and of a minimum of 9 semester units or 12 quarter units of upper division general education coursework at the California State University campus granting the degree. Again, the CSU campuses shall accept that certification as meeting all of the lower division general education requirements for the baccalaureate degree.

This section applies to all students transferring to the CSU from a UC campus on or after the beginning of the 1991-92 academic year.

RESTRICTIONS ON GENERAL EDUCATION CHANGES

The following recommendations were adopted by the Academic Senate November 16, 1988 and approved by the President:

- 1) Only one review of a particular GE-approved course will be allowed per five-year cycle.
- 2) In the case of a request to review a course, the department, which initiates the review, must document consultation and discussion of the course in question with the department, which offers it.
- 3) The request to review a course must come from a College Curriculum Committee and be directed to the Senate.
- 4) The referral must specifically address the criteria of the GE category in which the course is currently approved.

FRAMEWORK AND GUIDELINES FOR GENERAL EDUCATION

Minimum Achievement Levels for General Education Mathematics and English must be attained. Any remedial course work in English and Mathematics will not satisfy General Education baccalaureate requirements. Campus policy requires a meaningful writing component in each General Education area.

Courses intended for General Education and for the American Cultural Perspectives requirement will be evaluated separately for appropriateness.

GENERAL EDUCATION - UNIT DISTRIBUTION

The General Education Program at California State Polytechnic University, Pomona shall be organized to the following distribution areas:

- A) Communication and Critical Thinking (12 units); three courses, one course each from sub-areas one, two, and three.

- B) Natural Science and Mathematics (16 units); four courses, one each from sub-areas one, two, three, and four; sub-area four must be an upper-division synthesis course.
- C) Humanities (16 units), four courses, one each from sub-areas one, two, three, and four; sub-area four must be an upper-division synthesis course.
- D) Social Sciences (20 units); five courses, two courses in sub-area 1, and at least one course each from sub-areas two, three, and four; sub-area four must be an upper-division synthesis course.
- E) Lifelong Understanding and Self-Development (4 units)

GENERAL EDUCATION – APPROVED COURSEWORK

Courses are approved by the Academic Senate to meet the university general education program requirements. Coursework in general education should not be taken without a specific curricular goal. Students should consult with their departmental degree advisors or with the staff of the University Advising Center. Many degree programs specify which university-approved courses meet their specific degree requirements. Such departments will list approved courses in their degree curriculum layouts and their catalog section.

Certain professional programs include specific G.E. course patterns. Students should consult the curriculum of the specific major to identify the exact G.E. requirements for the major. Some courses may be taken on a credit/no credit basis. Please refer to corresponding major section in the University Catalog for prerequisites and detailed description of approved general education courses.

Courses listed, as a sequence should be taken in order. For example, in the sequence MAT 114--115, MAT 114 should be completed before taking MAT 115. Each course counts as one course toward meeting general education requirements.

INTERDISCIPLINARY GENERAL EDUCATION (IGE)

Students should also consult the coursework list for the INTERDISCIPLINARY GENERAL EDUCATION PROGRAM (IGE). This program is open to any department wishing to adopt it as an option, and provides an integrative-thematic approach to the Humanities and Social Sciences components of General education (areas A, C and D) for a total 36 units of the 48 lower-division units required. This program is designed as a two and one-half year program in which the participant studies both major coursework as well as courses designed to partially meet the University General Education requirement. Applicants for this program must take the EPT (score of 147 or better) or have this test waived because of other test scores (e.g., SAT, ACT, etc.). *This is the preferred pattern for students in engineering and architecture. Also recommended to all other students in the Colleges of Agriculture, Business Administration, Environmental Design, and Science. See departmental advisors or Program Director.*

TRANSFER/CHANGE OF MAJOR STUDENTS AND GE CERTIFICATION

Community college transfer students and Cal Poly Pomona change of major students are advised that, while they may be certified by their community colleges as having met all (or most) CSU lower division general education requirements, or have met GE requirements prior to change of major, many courses on the Cal Poly Pomona General Education list are also major department entrance or prerequisite requirements and will still have to be taken to meet degree requirements. For example, students may have met the quantitative reasoning requirement by taking an appropriate course at the community college, or at Cal Poly Pomona, and be so certified. This will not meet the calculus requirement for engineering, which also meets the Cal Poly Pomona GE quantitative reasoning requirement. Calculus will still have to be taken. Such excess coursework will be given as elective credit. Some transfer students may be certified by their community colleges as having met the CSU General Education quantitative reasoning requirement with coursework, which does not meet the Cal Poly

Pomona mathematics proficiency requirement. Such students will also have to take coursework to meet this graduation requirement.

General Education Program

Distribution of Units

The General Education Program shall be organized as follows:

Area A	Communication and Critical Thinking (12 units) One course each from sub-areas one, two, and three.	
	1) Written Communication	4 units
	2) Oral Communication	4 units
	3) Critical Thinking	4 units
Area B	Mathematics and Natural Science (16 units) At least one course from each sub-area: including at least one lab course each from sub-areas two, and three:	
	1) Mathematics/Quantitative Reasoning	4 units
	2) Physical Science	4 units
	3) Biological Science	4 units
	4) Science and Technology Synthesis (upper division)	4 units
Area C	Humanities (16 units) At least one course each from sub-areas: one, two, three, and four.	
	1) Fine and Performing Arts	4 units
	2) Philosophy and Civilization	4 units
	3) Literature and Foreign Language	4 units
	4) Humanities Synthesis (upper division)	4 units
Area D	Social Sciences (20 units) Two courses from sub-area one and at least one course each from sub-areas two, three, and four.	
	1) U.S. History, Constitution, and American Ideals	8 units
	2) History, Economics, and Political Science	4 units
	3) Sociology, Anthropology, Ethnic and Gender Studies	4 units

*IGE students will complete GE requirements in GE Program.

AREA A--COMMUNICATION AND CRITICAL THINKING--12 UNITS

(12 units, lower division)

The content of courses satisfying this area will include:

- A) The study of written and oral communication and critical thinking.
- B) Considerable written work, with emphasis on expository prose.
- C) Emphasis on clarity and lucidity of thought and its written and oral expression.
- D) Exploration, development, understanding, and use of visual communication media and skills.
- E) Instruction in analyzing, criticizing, and advocating ideas, reasoning deductively and inductively.

AREA B--MATHEMATICS AND NATURAL SCIENCE--16 UNITS

(12 units, lower division; sub-area 4 must be upper division.)

Instruction approved for fulfillment of this requirement is intended to impart knowledge of the facts and principles, which form the foundations of living and non-living systems. Such studies should promote understanding and appreciation of the methodologies of science as investigative tools, the limitations of scientific endeavors; namely, what is the evidence and how was it derived? In addition, particular attention should be given to the influence which the acquisition of scientific knowledge has had on the development of the world's civilization, not only as expressed in the past but also in present times. In specifying into mathematical concepts and quantitative reasoning and their application, the intent is not to imply merely basic computational skills, but to encourage as well the understanding of basic mathematical concepts. (Excerpted from Executive Order 595)

Students are required to take one course from sub-areas 1, 2, and 3 as defined below. At least one laboratory course from sub-area B or C is also required. In addition, the course for B4 must be upper division. Students should complete the lower division elements of Area B (1, 2, and 3) before taking their upper division B4 course.

1) Mathematics / Quantitative Reasoning

Courses in this area will require the student to use basic mathematical skills to develop mathematical reasoning, investigative and problem solving abilities. Development of these goals will include applications from/to real life situations.

Sub-Areas 2 and 3

In sub-areas 2 and 3 attention will be paid to the techniques of science as an investigative method--how science acquires evidence for its theories, how theories are developed, and so forth--as well as to the limitations of science.

2) Physical Sciences

Courses in this area will provide students with fundamental knowledge of the physical laws controlling the universe. This area will also reinforce the quantitative mathematical reasoning skills developed in sub-area 1 as well as the student's critical reasoning skills. Courses in this area will be investigative and not purely descriptive or historical.

3) Biological Sciences

Courses in this area will provide students with fundamental knowledge of living systems and their relationships with the world about them, including attention to diverse life forms, ecology, and evolution. Where applicable, scientific contributions from the various cultures of the world will be included.

- 4) Science and Technology Synthesis (must be upper division)
Courses in this area will deal both with the relationship between science, technology, and civilization and with the effect science and technology has on civilizations and human values. Appropriate issues to be explored by courses in this area include but are not limited to: the impact of specific technologies such as communications or computing technology; ecological issues; history and philosophy of science and technology; scientific method and reasoning; medical technology and its ethical implications; general systems theory and its applications to a variety of disciplines and situations.

AREA C--HUMANITIES--16 UNITS

Students are required to take one course each from sub-areas 1 through 4

Arts, Literature, Philosophy, and Foreign Languages. sub-areas 1, 2, and 3 -- 12 units (lower division, may include 4 units of upper division course work).

Each course in sub-areas 1, 2, and 3 must provide planned relationship to the other Humanities subject areas. In addition, each course in sub-areas 1, 2, and 3 must include a significant cross-cultural component.

Studies in sub-areas 1, 2, and 3 provide instruction in the traditional humanistic disciplines, enabling students to develop their intellect, imagination, and sensitivity. Instruction in these sub-areas will demonstrate both the continuity between the historical and the contemporary, and the relationships among the arts, the humanistic disciplines, self and society.

Instruction will reflect the contributions to knowledge and civilization that have been made by both men and women, and by different cultural groups in the world. In this pursuit, students should be motivated to cultivate and refine their affective as well as cognitive and physical faculties through studying great works of the human imagination.

1) Fine and Performing Arts

Courses will enable students to experience and appreciate the fine and performing arts in order to gain access to the realms of creativity, imagination, and feeling that explore the meaning of what it is to be human. Courses could include active, participation in aesthetic and creative experience. Students should understand how disciplined, individual creativity could produce objects that are neither obviously useful or practical but that clarify, intensify and enlarge human experience. Courses will provide a sense of the values that inform artistic expression and performance, and their interrelationships with human society.

2) Philosophy and Civilization

Courses in this area will provide students with an understanding of the values that make a civilized and humane society possible. Courses will enable students to examine critically the philosophical ideas and theories around which difference civilizations have been organized, and to explore the complex developments of those civilizations. In the study of philosophy, students should come to understand and appreciate the principles, methodologies, and thought processes employed in human inquiry. Courses should promote the capacity to make informed and responsible moral choices. Moreover, they should encourage broad historical understanding enabling students to see the past in the present and the present in the past.

3) Literature and Foreign Languages

Courses in this area will provide students with an appreciation of languages and literature, underscoring both the relationships between culture and language, and the importance of literature in the interpretation of culture. Students in literature and foreign languages should better understand the significance of great creative writings and communicative customs and traditions of particular cultures. Instruction in these courses will deepen students' appreciation of

enduring works of literature and of the contributions of diverse cultures to our literacy and linguistic heritage.

4) Humanities Synthesis (upper division)

Courses emphasize the humanistic or expressive aspects of culture. Synthesis offerings should provide temporal and cultural context that will illuminate contemporary thought and behavior-global, regional, and local - showing the bonds between the past, present, and future.

AREA D--HUMANITIES--20 UNITS

Students are required to take two courses from sub-area D1 and one each from sub-areas 2 through 4

1) U.S. History, Constitution, and American Ideals - 8 units

Current methods of satisfying these requirements are continued. Alternative proposals may be submitted. These proposals should conform to the following requirements taken from Title 5, Article 5, "General Requirements for Graduation" Section 40404, "Requirements in United States History, Constitution and American Ideals" (Board of Trustees CSU Register dated 1/10/92)

The purpose of the following requirements is to ensure that: students acquire knowledge and skills that will help them to comprehend the workings of American democracy and of the society in which they live to enable them to contribute to that society as responsible and constructive citizens. To this end each campus shall provide for comprehensive study of American history and American government including the historical development of American institutions and ideals, the Constitution of the United States and the operation of representative democratic government under that Constitution, and the processes of state and local government. To qualify for graduation each student shall demonstrate competence by completing courses in the foregoing fields. Students transferring from other accredited institutions shall not be required to take further courses or examination therein.

<p>Note: The last sentence applies fully only for courses taken in California. Students who have completed courses on the federal government and the federal constitution must still either take an approved course covering California government or pass an examination administered at Cal Poly Pomona.</p>
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2) History, Economics, and Political Science - 4 units

3) Sociology, Anthropology, Ethnic and Gender Studies - 4 units

Courses in each sub-area will introduce students to the methods and theories pertaining to economic, social, and political analysis respectively. Courses in sub-area D2 and D3 should also show how human social, economic, political, and historical institutions are inextricably interwoven.

Thus, while the subject matter of each D2 and D3 course will emphasize a particular content area, each course should also demonstrate the interrelatedness of sub-areas D2 and D3.

To accomplish this goal, these courses will include substantial coverage of interdisciplinary issues so those students can connect sometimes-fragmented information and draw meaningful conclusions. Problems and issues in these sections should be examined in contemporary as well as historical contexts, and include significant global and cross-cultural perspectives.

Courses in sub-areas D2 and D3 will integrate critical thinking and analysis. Students will be able to generalize, draw comparisons, detect logical fallacies, and perceive the interrelatedness of human social, political, and economic institutions and behaviors.

4) Social Science Synthesis (upper division) - 4 units

Courses should focus on a deeper understanding of a set of concepts and their application in the solution of a variety of specific social problems. Courses may take a broader, more integrative approach and examine the historical development and cross-cultural distribution of patterns of social behavior as well as different theories and approaches in the field.

AREA E--LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT--4 UNITS

The content of courses to fulfill Area E should facilitate understanding of the human being as an integrated physiological, social, and psychological entity. Courses may include the following, and could include a physical activity if integrated in the above:

- Selective consideration of such matters as human behavior, sexuality, nutrition, health, and stress
- Relationships of people to their social and physical environment
- Aging, dying and death

GUIDELINES FOR SUBMITTING GE SYNTHESIS COURSE PROPOSALS

Synthesis course guidelines are located in Appendix D.

AMERICAN CULTURAL PERSPECTIVES REQUIREMENT

Criteria for Courses to Fulfill American Cultural Perspectives Requirement (AS-887-934/GE)

Coursework in American Cultural Perspectives is a graduation requirement. The courses that satisfy this requirement may be part of a student's GE program, major, or minor or may be taken as electives. These requirements will not constitute an additional unit load on the degree requirements of a student in any program. To satisfy this requirement a student must take at least one four-unit course.

Courses that meet the American Cultural Perspectives requirement should satisfy all of the following criteria:

- Introduce theoretical perspectives and non-western/non-traditional approaches for studying gender, ethnicity, and class;
- Include the study of at least one other marker of social difference, such as sexual orientation, religious affiliation, national origin, etc.;
- Cover at least two of the following socio-cultural groups: African Americans, Native Americans, Chicano/Latino Americans, Asian Americans, Pacific Islands Americans, Middle Eastern Americans, or European/White ethnic Americans;
- Address intra-cultural differences as well as inter-cultural commonalties. Differences may be examined by focusing on diverse cultural practices, environmental ethics, political histories, religious beliefs, or means of artistic expression.

All colleges and academic units are invited to submit proposals to the Office of Academic Programs for lower and/or upper division courses that meet these guidelines. The Academic Senate shall be responsible for determining whether a course meets the above guidelines and shall refer all requests for inclusion on the American Cultural Perspectives course list to the General Education Committee.