AP 4100 requires Associate in Arts, Associate in Science, and Associate Degree for Transfer (ADTs) to include general education. The following details adopted criteria for Cabrillo’s various general education patterns, and the process followed to make changes and additions to these patterns.

A. Adopted Criteria

1. The following statements shall serve as the criteria for the inclusion of courses in the Cabrillo College general education pattern. Courses satisfying a general education requirement should be at the introductory level and should provide breadth in the subject area rather than specialization.

Area A. English Language Communication and Critical Thinking

Instruction approved for fulfillment of the requirement in communication should concern itself with both the content and the form of communication, with both written and oral communication, and with a variety of relevant parameters defining the nature and purpose of communication. These parameters should include social, psychological, rhetorical, logical, interpretative and evaluative influences. Courses in this area should address the issues of effective versus ineffective communication, adequate versus simplistic, philistine and prejudiced versus informed and aware.

Instruction in critical thinking should be designed to achieve an understanding of the process of logical reasoning and should teach how to distinguish between valid and fallacious reasoning, between fact and judgment, and between belief and knowledge. Courses satisfying this requirement should enable the student to identify cogent and weak arguments and to appraise both the subject under study and interpretations and assessments of the subject. Either implicitly or explicitly, courses in this area should address the question of the relationship between emotion and thought when making or appraising a claim. The goal is to develop the student’s capacity of discourse based on reason and to see the ways in which reason and emotion, rhetoric and logic can legitimately interact. Mathematics courses which satisfy this requirement should, in addition to teaching basic computational skills, encourage the understanding of basic mathematical concepts and of the process of quantitative reasoning.

Area B. Scientific Inquiry

Instruction approved for the 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 civilizations, not only as expressed in the past, but also in present times.

**Area C. Arts and Humanities**

Instruction approved for the fulfillment of this requirement should cultivate intellect, imagination, sensibility and sensitivity. It is meant in part to encourage students to respond subjectively as well as objectively to experience and to develop a sense of the integrity of emotional and intellectual response. Students should be motivated to cultivate their affective as well as cognitive physical faculties through studying great works of the human imagination, which could include active participation in individual aesthetic, creative experience.

Equally important is the intellectual examination of the subjective response, thereby increasing awareness and appreciation in the traditional humanistic disciplines such as art, dance, drama, literature and music. The requirement should result in the student’s better understanding of the interrelationship between the creative arts, the humanities and self. Studies in these areas should include exposure to both Western cultures and non-Western cultures where relevant.

**Area D. Social Sciences**

Instruction approved for fulfillment of this requirement should reflect the fact that human social, political and economic institutions and behavior are inextricably interwoven. Problems and issues in these areas should be examined in their contemporary as well as historical setting, including both Western and non-Western contexts.

**Area E. Lifelong Learning and Self Development**

Instruction approved for fulfillment of this requirement should facilitate understanding of the human being as an integrated physiological, social, and psychological organism. Courses developed to meet this requirement are intended to include selective consideration of such matters as human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying. Physical activity could be included, provided that is an integral part of the study described herein.

**Multicultural Studies Requirement**

The purpose of the Multicultural Studies requirement is to promote awareness, understanding, appreciation, and respect for underrepresented ethnic and racial cultures and to help students link their personal experiences and their education with broad cultural perspectives. (This statement is taken from the original statement of purpose for the requirement – 1991.)

2. The following statements shall serve as the criteria for proposing courses to CSU for inclusion in the CSU GE list used to complete the Transferable AA/AS
Degrees and Associate Degrees for Transfer (ADTs). This criterion is taken directly from Executive Order Nos. 595 and 1065 and is modified to exclude upper-division CSU requirements

Area A English Language Communication and Critical Thinking.
Minimum 9 semester units or 12 quarter units - one course in each subarea

A1 Oral Communication
(3 semester units or 4 quarter units)

A2 Written Communication
(3 semester units or 4 quarter units)

A3 Critical Thinking
(3 semester units or 4 quarter units)

A minimum of nine semester units or twelve quarter units in communication in the English language, to include both oral communication (subarea A1) and written communication (subarea A2), and in critical thinking (Area A3), to include consideration of common fallacies in reasoning.

Students taking courses in fulfillment of subareas A1 and A2 will develop knowledge and understanding of the form, content, context, and effectiveness of communication. Students will develop proficiency in oral and written communication in English, examining communication from the rhetorical perspective and practicing reasoning and advocacy, organization, and accuracy. Students will practice the discovery, critical evaluation, and reporting of information, as well as reading, writing, and listening effectively. Coursework must include active participation and practice in both written communication and oral communication in English.

In critical thinking (subarea A3) courses, students will understand logic and its relation to language; elementary inductive and deductive processes, including an understanding of the formal and informal fallacies of language and thought; and the ability to distinguish matters of fact from issues of judgment or opinion. In A3 courses, students will develop the abilities to analyze, criticize, and advocate ideas; to reason inductively and deductively; and to reach well-supported factual or judgmental conclusions.

Area B Scientific Inquiry and Quantitative Reasoning.
Minimum of 10 semester units or 15 quarter units - one course each in subareas B1, B2, and B4, plus laboratory activity related to one of the completed science courses

B1 Physical Science
(3 semester units or 4 quarter units)

B2 Life Science
(3 semester units or 4 quarter units)

B3 Laboratory Activity
Chapter Three: Instruction and Instructional Planning

Associated with a course taken to satisfy either B1 or B2

**B4 Mathematics/Quantitative Reasoning**  
(3 semester units or 4 quarter units)

A minimum of ten semester units or fifteen quarter units to include inquiry into the physical universe and its life forms, with some immediate participation in a related laboratory activity, and into mathematical concepts and quantitative reasoning and their applications.

In subareas B1-B3, students develop knowledge of scientific theories, concepts, and data about both living and non-living systems. Students will achieve an understanding and appreciation of scientific principles and the scientific method, as well as the potential limits of scientific endeavors and the value systems and ethics associated with human inquiry. The nature and extent of laboratory experience is to be determined by each campus through its established curricular procedures.

Courses in subarea B4 shall have an explicit intermediate algebra prerequisite, and students shall develop skills and understanding beyond the level of intermediate algebra. Students will not just practice computational skills, but will be able to explain and apply basic mathematical concepts and will be able to solve problems through quantitative reasoning.

**Area C Arts and Humanities.**

**Minimum of 9 semester units or 13.5 quarter units** - at least one course completed in each of these two subareas:

**C1 Arts:** Arts, Cinema, Dance, Music, Theater

**C2 Humanities:** Literature, Philosophy, Languages Other than English

A minimum of nine semester units or thirteen and one-half quarter units among the arts, literature, philosophy and foreign languages.

Across the disciplines in their Area C coursework, students will cultivate intellect, imagination, sensibility and sensitivity. Students will respond subjectively as well as objectively to aesthetic experiences and will develop an understanding of the integrity of both emotional and intellectual responses. Students will cultivate and refine their affective, cognitive, and physical faculties through studying great works of the human imagination. Activities may include participation in individual aesthetic, creative experiences; however Area C excludes courses that exclusively emphasize skills development.

In their intellectual and subjective considerations, students will develop a better understanding of the interrelationship between the self and the creative arts and of the humanities in a variety of cultures.

Students may take courses in languages other than English in partial fulfillment of this requirement if the courses do not focus solely on skills acquisition but also
contain a substantial cultural component. This may include literature, among other content. Coursework taken in fulfillment of this requirement must include a reasonable distribution among the subareas specified, as opposed to restricting the entire number of units required to a single subarea.

Area D Social Sciences.
Minimum of 9 semester units or 13.5 quarter units
A minimum of nine semester units or thirteen and one-half quarter units dealing with human social, political, and economic institutions and behavior and their historical background.

Students learn from courses in multiple Area D disciplines that human social, political and economic institutions and behavior are inextricably interwoven. Through fulfillment of the Area D requirement, students will develop an understanding of problems and issues from the respective disciplinary perspectives and will examine issues in their contemporary as well as historical settings and in a variety of cultural contexts. Students will explore the principles, methodologies, value systems and ethics employed in social scientific inquiry. Courses that emphasize skills development and professional preparation are excluded from Area D. Coursework taken in fulfillment of this requirement must include a reasonable distribution among the subareas specified, as opposed to restricting the entire number of units required to a single subarea.

Area E Lifelong Learning and Self-Development.
Minimum of 3 semester units or 4 quarter units
A minimum of three semester units or four quarter units in study designed to equip learners for lifelong understanding and development of themselves as integrated physiological, social, and psychological beings.

Student learning in this area shall include selective consideration of content such as human behavior, sexuality, nutrition, physical and mental health, stress management, financial literacy, social relationships and relationships with the environment, as well as implications of death and dying and avenues for lifelong learning. Physical activity may be included, provided that it is an integral part of the study elements described herein.

Multicultural Studies Requirement (required for all Cabrillo degrees, excluding the ADT degrees)

The purpose of the Multicultural Studies requirement is to promote awareness, understanding, appreciation, and respect for underrepresented ethnic and racial cultures and to help students link their personal experiences and their education with broad cultural perspectives. (This statement is taken from the original statement of purpose for the requirement - 1991)
Chapter Three: Instruction and Instructional Planning

Up to six semester units taken to meet the United States History, Constitution, and American Ideals Requirement (Title 5 of the California Code of Regulations, Section 40404) may be credited toward satisfying General Education-Breadth Requirements at the option of the campus.

3. The following statements shall serve as the criteria for proposing courses to UC/CSU for inclusion in the Intersegmental General Education Transfer Curriculum (IGETC) used to complete the Transferable AA/AS Degrees and Associate Degrees for Transfer (ADTs). The IGETC Standard is maintained by the faculties of the University of California, the California State University, and the California Community Colleges, all through their elected representatives on the Intersegmental Council of Academic Senates (ICAS). Version 1.5 approved June, 5, 2014.

**Area 1: English Communication**

(3 courses; 9 semester, 12-15 quarter units)

*Note: quarter unit courses must be 4 quarter units each, minimum*

The English Communication requirement shall be fulfilled by completion of three semesters or nine units of lower-division courses in English reading and written composition Area 1A (1 course), critical thinking-English composition Area 1B (1 course), and oral communication (Area 1C)* (1 course).

Area 1A: A first-semester course in English reading and written composition must include substantial instruction and practice in expository essay writing at the college level with a minimum of 6,000 words. Courses should also require a substantial amount of reading of significant literature. Successful completion of the course in reading and written composition must be prerequisite to the course in critical thinking/English composition.

Area 1B: The second semester of English may be met by those courses in critical thinking taught in a variety of disciplines which provide, as a major component, instruction in the composition of substantial essays and require students to write a sequence of such essays. Written work shall be evaluated for both composition and critical thinking. Texts chosen in this area should reflect an awareness of cultural diversity. A minimum of 6,000 words of writing is required.

Instruction in critical thinking is to be designed to achieve an understanding of the relationship of language to logic, which should lead to the ability to analyze, criticize, and advocate ideas, to reason inductively and deductively, and to identify the assumptions upon which particular conclusions depend. The minimal competence to be expected at the successful conclusion of instruction in critical thinking should be the ability to distinguish fact from judgment, and belief from knowledge; to use elementary inductive and deductive processes, and to recognize common logical errors or fallacies of language and thought.
Area 1C: Instruction approved for fulfillment of the requirement in communication is to be designed to emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and the social significance of communication, including how communication operates in various situations. Applicable course(s) should view communication as the process of human symbolic interaction focusing on the communicative process from the rhetorical perspective: reasoning and advocacy, organization, accuracy; the discovery, critical evaluation and reporting of information; reading and listening effectively as well as speaking and writing. This must include active participation and practice in written communication and oral communication.

*Students transferring to UC do not have to meet the oral communication requirement

**Area 2A: Mathematical Concepts and Quantitative Reasoning**

(1 course; 3 semester, 4-5 quarter units)

The Mathematical Concepts and Quantitative Reasoning requirement shall be fulfilled by completion of a one-semester course in mathematics or statistics above the level of intermediate algebra, with a stated course prerequisite of Intermediate Algebra. Courses outside the discipline of math using the application of statistics may be used to fulfill this requirement, as long as the course has intermediate algebra as a prerequisite and knowledge of intermediate algebra is necessary to be successful. An appropriate course in statistics must emphasize the mathematical basis of statistics, probability theory and estimation, application and interpretation, uses and misuses, and the analysis and criticism of statistical arguments in public discourse.

Knowledge relevant to public and private decision making is expressed frequently in quantitative terms, we are routinely confronted with information requiring quantitative analysis, calculation, and the ability to use and criticize quantitative arguments. In addition, many disciplines require a sound foundation in mathematical concepts. The requirement in Mathematical Concepts and Quantitative Reasoning is designed to help prepare students to respond effectively to these challenges.

**Area 3: Arts and Humanities**

(3 courses; 9 semester, 12-15 quarter units)

At least one course in the Arts and at least one course in the Humanities are required. Note: quarter unit courses must be 4 quarter units, minimum.

The Arts and Humanities requirement shall be fulfilled by completion of at least three courses which encourage students to analyze and appreciate works of philosophical, historical, literary, aesthetic and cultural importance. Students who have completed this requirement shall have been exposed to a pattern of coursework designed to develop an historical understanding of major civilizations
and cultures, both Western and non-Western, and should recognize the contributions to knowledge, civilization and society that have been made by men and women, and members of various ethnic or cultural groups.

At least one course shall be completed in the Arts and one in the Humanities. Within the Arts area, performance and studio classes may be credited toward satisfaction of this subject area if their major emphasis is the integration of history, theory and criticism. CSU campuses have the discretion whether to allow courses used to satisfy the CSU United States History, Constitution and American Ideals graduation requirement to count in both Areas 3B/4 and to meet the AI graduation requirement.

The Arts and Humanities historically constitute the heart of a liberal arts general education because of the fundamental humanizing perspective that they provide for the development of the whole person. Our understanding of the world is fundamentally advanced through the study of Western and non-Western philosophy, language, literature, and the fine arts.

Inclusion of the contributions and perspectives of men and women, and members of various ethnic or cultural groups shall be included.

**Area 4: Social and Behavioral Sciences**
(at least 3 courses; 9 semester, 12-15 units)

*Note: quarter unit courses must be 4 quarter units, minimum.*

The Social and Behavioral Sciences requirement shall be fulfilled by completion of at least three courses dealing with individual behavior and with human social, political, and economic institutions and behavior in a minimum of two disciplines or in an interdisciplinary sequence. The pattern of coursework completed shall ensure opportunities for students to develop understanding of the perspectives and methods of the social and behavioral sciences. Problems and issues in these areas should be examined in their contemporary, historical, and geographical settings. Students who have completed this requirement shall have been exposed to a pattern of coursework designed to help them gain an understanding and appreciation of the contributions and perspectives of women and of ethnic and other minorities and a comparative perspective on both Western and non-Western societies. The material should be presented from a theoretical point of view and focus on core concepts and methods of the discipline rather than on personal, practical, or applied aspects. CSU campuses have the discretion whether to allow courses used to satisfy the CSU United States History, Constitution and American Ideals (AI) graduation requirement to count in both Areas 3B/4 and to meet the AI graduation requirement.

Courses in the Social and Behavioral Sciences allow students to gain a basic knowledge of the cultural and social organizations in which they exist as well as the behavior and social organizations of other human societies. People have, from
earliest times, formed social and cultural groups that constitute the framework for
the behavior of the individual as well as the group. Inclusion of the contributions
and perspectives that have been made by men and women, and of various ethnic
or cultural groups as part of each study will provide a more complete and accurate
view of the world.

Introduction to American Government courses are not required to contain a
California Government component in order to be applied in Area A4. However, a
California Government component is required for the CSU AI requirement.

**Area 5A/B/C: Physical and Biological Sciences**
(at least 2 courses; 7-9 semester, 9-12 quarter units)

The Physical and Biological Sciences requirement shall be fulfilled by completion
of at least two courses, one of which is in Physical Science and one in Biological
Science, at least one of which incorporates a laboratory. Courses must emphasize
experimental methodology, the testing of hypotheses, and the power of systematic
questioning, rather than only the recall of facts. Courses that emphasize the
interdependency of the sciences are especially appropriate for non-science majors.

The contemporary world is influenced by science and its applications, and many
of the most difficult choices facing individuals and institutions concern the
relationship of scientific and technological capability with human values and
social goals. To function effectively in such a complex world, students must
develop a comprehension of the basic concepts of physical and biological
sciences, and a sophisticated understanding of science as a human endeavor,
including the limitations as well as the power of scientific inquiry.

**Language Other Than English**
Students shall demonstrate proficiency in a language other than English equal to
two years of high school study. Those students who have satisfied the UC
freshman entrance requirement in a language other than English will have
fulfilled this requirement. This requirement may also be satisfied by
demonstration of equivalent proficiency prior to transfer.

* Students transferring to CSU are not required to meet the requirement of a
  proficiency in a language other than English.

**IGETC for STEM majors**
Students preparing for a major in science, technology, engineering or mathematics
are eligible to use the IGETC for STEM Majors pattern. IGETC for STEM will
allow them to concentrate on the lower division math and science courses
required for a STEM major. To use the IGETC for STEM pattern, it must be
impossible for students to complete major preparation coursework and IGETC or
CSU GE Breadth within 60 units prior to transfer. Students may defer two lower-
division general education courses, plus the language other than English.
requirement and replace them with calculus and/or science courses required by the major before transfer.

For students pursuing an ADT degree, IGETC for STEM may only be used if the TMC for the major explicitly indicates the availability of the option.

The college will refer to the current IGETC Standard for specific details and requirements.

**Multicultural Studies Requirement** (required for transferable Cabrillo degrees, excluding the ADT degrees.)

The purpose of the Multicultural Studies requirement is to promote awareness, understanding, appreciation, and respect for underrepresented ethnic and racial cultures and to help students link their personal experiences and their education with broad cultural perspectives. (This statement is taken from the original statement of purpose for the requirement - 1991)

4. The Academic Council shall recommend to the Faculty Senate any changes in the criteria to determine which courses may be used to satisfy general education requirements.

5. The Faculty Senate shall recommend the criteria to the Vice President, Instruction who will recommend to the Governing Board.

**B. Changes to the List of Courses Satisfying General Education Courses for the Associate Degree (AA/AS), California State University General Education (CSUGE), and Intersegmental General Education Transfer Curriculum (IGETC)**

1. The Academic Council shall annually review the lists of courses satisfying general education requirements.

2. Each fall and spring the Chair of the Curriculum Committee will forward to the Chair of the Academic Council the curriculum committee book. Changes affecting general education course listings for CSUGE and IGETC will be reviewed in consultation with the Director of Articulation.

3. Division representatives will be responsible for reviewing the courses within their divisions and recommending deletions based on the criteria listed in step # 4.

4. Deletion of courses from the general education list will be based upon the following criteria:
   (i) any course that has not been offered in six consecutive semesters
   (ii) any course that is inactivated or deleted by the Curriculum Committee
   (iii) any course in which the content or unit value has changed so substantially that the course no longer qualifies for general education.

5. Following review by the Academic Council, the Chair of the Academic Council will recommend deletions from the general education course listings to the President of the Faculty Senate.
C. Course Additions to the General Education Lists: Associate Degrees (AA/AS), California State University General Education (CSUGE), and Intersegmental General Education Transfer Curriculum (IGETC)

Instructors may propose that both new and existing courses be added to the general education lists for the AA/AS and may recommend that new and existing courses be added to CSUGE and IGETC. For new courses, instructors will follow steps 1 - 6; for existing courses, instructors will follow steps 3 - 4.

1. New course proposal forms will have a space for the course proposer to recommend that a course satisfy a specific general education area. The Curriculum Handbook will include criteria for each area of general education for the three general education lists as a guide for the proposer.

2. The Director of Articulation, who is a member of the Curriculum Committee and the Academic Council, will forward to the course proposer the general education proposal form for all three general education patterns. The articulation officer will act as a consultant regarding criteria and procedures for submitting courses for inclusion in CSUGE and IGETC.

3. The instructor will submit a written statement to the Chair of the Academic Council indicating the area under which the course would fall for each general education list together with rationale to support the request. All requests must be signed by the appropriate division chair.

4. The request, together with a copy of the title 5 course outline, will then be given to the Chair of the Academic Council.

5. Instructors who want to propose existing courses for inclusion in any general education list should request the general education proposal form from the articulation officer and then follow steps 3 and 4.

6. The Academic Council will review the request and invite the course proposer to attend a meeting if necessary.

7. The Chair of the Academic Council will notify the instructor of the Council’s decision.

8. Recommendations of the Academic Council for course additions will be forwarded to the President of the Faculty Senate.

9. The Faculty Senate will forward its proposals for deletions and additions to general education lists to the Vice President, Instruction, who will make recommendations to the Governing Board for inclusion in the next year’s catalog, schedule of classes, and official student handouts.

10. The Faculty Senate and the Vice President Instruction will direct the Director of Articulation to submit course additions and deletions for California State University General Education and the Intersegmental General Education Transfer Curriculum to the appropriate segmental and intersegmental committees each December as required.

11. The Director of Articulation will notify the Academic Council of the decisions of the CSUGE and the IGETC committees each May.
12. The Director of Articulation will update all general education information in the college catalog, schedule of classes, college electronic databases, and official student handouts.

Additions to the Multicultural Studies List

1. Courses which are already identified as general education courses for the associate degree may be submitted to the Academic Council for inclusion in the list of courses which satisfy the Multicultural Studies Requirement.

2. Instructors who want to propose a course for the Multicultural Studies Requirement should obtain the appropriate form and criteria from the articulation officer. Instructors will then submit the completed form, together with a copy of the title 5 course outline, to the Chair of the Academic Council.

3. Once the request has been received by the Academic Council, steps 7 - 9 as indicated above will be followed. The Director of Articulation will update all general education information in the college catalog, schedule of classes, college electronic databases, and official student handouts.

D. The Academic Council is a Committee of the Faculty Senate and its membership appears in the Faculty Senate Constitution.

- The Academic Council has the following membership:
- Vice President of Instruction
- Two counselors
- One member from each instructional division
- One student
- Director of Articulation

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