



## University Policy Statement California State University, Fullerton

### UPS 411.201

## GENERAL EDUCATION: GOALS FOR STUDENT LEARNING

### The Goals of General Education

General education is central to a university education, and should enhance students' awareness of themselves in a complex universe, drawing upon multiple points of view. As a result of general education experience, students should acquire **knowledge** of diverse disciplinary and cultural perspectives and **skill** in comparing, contrasting, applying, and communicating effectively these perspectives in tasks considered appropriate to particular courses.

The General Education Program at California State University, Fullerton, is divided into five major Areas: A. Core Competencies, B. Scientific Inquiry and Quantitative Reasoning, C. Arts and Humanities, D. Social Sciences, E. Lifelong Learning and Self-Development. These five areas consist of lower division (100- and 200-level) courses in areas fundamental to a university education and upper division (300- and 400-level) courses that draw upon, integrate, apply, and extend the knowledge and skills that are the goals of the lower division courses.

A sixth Area includes goals for learning in the area of Cultural Diversity. Student work in categories C.3 (Explorations in the Humanities), D.5 (Explorations in the Social Sciences), or E (Lifelong Learning and Self-Development) must include at least one three-unit course, identified with a star (\*), that meets the learning goals for Area Z, Cultural Diversity.

The goals of Area A, Core Competencies, are essential goals for the entire program of general education. General education courses shall include student writing assignments appropriate to the course, and, when compatible with the learning goals for a course, appropriate instruction in information competency. Writing assignments in General Education courses shall involve the organization and expression of complex data or ideas and careful and timely evaluations of writing so that deficiencies are identified and suggestions for improvement and/or for means of remediation are offered. Assessments of the student's writing competence shall be used in determining the final course grade. Courses incorporating information competency shall provide opportunities for students to find, evaluate, select, synthesize, organize, cite, and present information and arguments clearly and effectively for a variety of purposes and audiences.

The learning goals specified in this document identify ideal student learning objectives for each General Education Area and subarea. Except where otherwise specifically provided for, no single course should necessarily be expected to pursue every goal specified for that course's Area or subarea, although each course should meet the preponderance of the learning goals within that Area or subarea, thus satisfying the spirit and intention of the learning goals (i.e., the more goals that a particular course addresses the more appropriate that course will be as a general education offering.)

Course syllabi for courses that meet General Education requirements shall include the following:

- a. A statement of the specific General Education requirement(s) that the course meets.
- b. An inclusion of the learning goals for the General Education Area or subarea in which the course carries credit.
- c. Courses in Oral Communication (A.1) Written Communication (A.2), Critical Thinking (A.3) and Mathematics/Quantitative Reasoning (B.4) shall include a statement that “A grade of “C” (2.0) or better is required to meet this General Education requirement. A grade of “C-” (1.7) or below will not satisfy this General Education requirement.”
- d. An indication of the way in which the General Education writing requirement shall be met and assessed.

## **A. Core Competencies**

(9 units minimum)

The Core Competencies include Oral Communication (3 units minimum), Written Communication (3 units minimum), and Critical Thinking (3 units minimum).

### **Overall Goals**

Students taking courses in Area A shall

- Organize one’s thoughts and communicate them clearly and effectively, using language that demonstrates sensitivity to gender and cultural differences.
- Find, evaluate, select, synthesize, organize, cite and present information and arguments clearly and effectively for a variety of purposes and audiences.
- Recognize and evaluate the features, functions, and contexts of language that express and influence meaning.
- Compare and contrast with care and accuracy the relative merits of alternative or opposing arguments, interpretations, assumptions, and cultural values.
- Reflect in an open-minded manner on one’s own thinking in relation to the ideas of others.

### **A.1. Oral Communication** (3 units minimum)

Courses in subarea A1 must be taught in English. Students taking courses in subarea A1 shall

- a. Demonstrate the ability to present faculty-supervised, faculty-evaluated practice in communicating orally (e.g., not online or recorded).
- b. Understand the rhetorical principles that underlie form, content, context, and effectiveness of communication choices in formal speeches or social interactions.

- c. Present well-organized oral messages practicing sound reasoning and advocacy that depend on the effective discovery, critical evaluation, accurate presentation, and clear reporting of relevant information and supporting evidence.
- d. Understand how culture and social context influence oral communication and to appreciate the value of different communication styles.
- e. Select and use effectively appropriate techniques and materials to support ideas and to motivate and persuade others.

**A.2. Written Communication** (3 units minimum)

Courses in subarea A2 must be taught in English. Students taking courses in subarea A2 shall

- a. Develop and present clearly written messages in English.
- b. Express and advocate ideas clearly and effectively in writing.
- c. Present well-organized written messages exhibiting sound reasoning and advocacy that depend on the critical evaluation of relevant information.
- d. Understand the rhetorical principles that underlie form, content, context, and effectiveness of choices made in written messages including how matters of style affect successful communication.
- e. Improve one's own writing skills through the critique of the writing of others.
- f. Use writing to synthesize creative and innovative ideas, solutions, and knowledge.

**A.3. Critical Thinking** (3 units minimum)

Students taking courses in subarea A3 shall

- a. Understand the role of logic and its relation to language.
- b. Understand elementary inductive and deductive processes, including formal and informal fallacies.
- c. Develop the skills to distinguish propositions and statements of fact from issues of judgment or opinion.
- d. Develop skills to advocate for ideas.
- e. Develop skills to reach well-supported factual and judgmental conclusions and the skills to successfully advocate for these conclusions.
- f. Evaluate, critique, and analyze the quality and sufficiency of evidence and other forms of support for a position, include recognition of underlying lines of argument.

## **B Scientific Inquiry and Quantitative Reasoning**

(12 units minimum)

Scientific Inquiry and Quantitative Reasoning includes Physical Science (3 units minimum), Life Science (3 units minimum), Laboratory Experience (0–3 units), Mathematics/Quantitative Reasoning (3 units minimum), and Implications and Explorations in Mathematics and the Natural Sciences (0-3 units).

### **Shared Learning Goals**

#### **B.1 Physical Science**

#### **B.2 Life Science**

#### **B.3 Laboratory Experience**

Subareas B.1, B.2 and B.3 share a set of core learning goals. Students taking courses in subareas B.1, B.2 and B.3 shall

- a. Understand the nature of scientific inquiry and the unique way that the natural sciences and mathematics describe the universe.
- b. Evaluate the validity and limitations of theories and scientific claims in interpreting experimental results.
- c. Understand the dynamic and evolving nature of the sciences.
- d. Recognize the importance of scientific paradigms and methods in understanding scientific concepts.
- e. Use quantitative techniques and scientific reasoning to investigate problems and phenomena in the natural universe.
- f. Understand the potential limits of scientific endeavors and the value systems and ethics associated with human inquiry.
- g. Understand different types of uncertainty and its impact on scientific methodology and reasoning.
- h. Analyze and manipulate graphical representations of data.
- i. Formulate and evaluate hypotheses using quantitative techniques.
- j. Use statistical techniques to evaluate uncertainty in experimental data.

#### **B.1 Physical Science (3 units minimum)**

Students taking courses in subarea B.1 shall explore the core goals described above through in-depth exploration of the physical universe. Students taking courses in subarea B1 shall obtain a foundational understanding of either the nature of matter and energy, or Earth as a planet and its relation to the universe.

Students taking courses focusing on the nature of matter and energy shall

- a. Understand that energy exists in many forms, and that in any process, energy changes form and/or place, but the total amount of energy remains the same.
- b. Recognize that objects interact with one another by exerting forces, and that unbalanced forces acting on an object cause change in the motion of the object.
- c. Understand that all matter has observable properties that depend on the conditions and scale at which we look. Investigations of matter at the atomic and subatomic levels explain the properties, reactions, and interactions of matter.

Students taking courses focusing on the Earth as a planet and its relation to the universe shall

- d. Apply basic principles of the physical and life sciences to understand earth and astronomical systems.
- e. Understand that earth materials and structures are organized in interacting systems and that the Earth itself is part of a planetary system.
- f. Understand that the Earth changes continuously, and is part of a universe that itself is changing.
- g. Recognize that energy and matter flow and cycle through earth and astronomical systems, of which human society is an integral part.
- h. Understand that changes within an earth or astronomical system may affect other earth or astronomical systems. Humans are part of and may affect or be affected by these systems.
- i. Understand that earth and astronomical systems have interacted and evolved over billions of years encompassing the lifetime of planet Earth, the solar system, and the universe.

## **B.2 Life Science (3 units minimum)**

Students taking courses in subarea B.2 shall explore the foundations of the Life Sciences through in-depth exploration of living systems. Students taking courses in subarea B.2 shall

- a. Understand that living things are made of smaller structures whose functions enable organisms to survive.
- b. Understand that living things depend on each other and the physical environment as they interact to obtain, change, and exchange matter and energy.
- c. Understand that the great diversity of living things, ranging from single-celled organisms to complex, multi-celled organisms including microbes, plants, and animals, is the result of billions of years of evolution through the mechanisms of heredity, mutation, and natural selection.

**B.3 Laboratory Experience**

(1 laboratory component associated with a course in B1 or B2, 0-3 units)

Students taking courses in subarea B3 shall

- a. Apply scientific methodology through active experimental methods and experiences (laboratory/activity).
- b. Evaluate the validity and limitations of theories and scientific claims in interpreting experimental results.

**B.4 Mathematics/Quantitative Reasoning (3 units minimum)**

A grade of “C” (2.0) or better is required to complete courses in Area B4. Courses meeting the requirement for subarea B4 have an explicit intermediate algebra prerequisite that is met by successfully completing the Entry-Level Mathematics (ELM) Exam or by passing either MATH 040 (Intermediate Algebra) or MATH 030AB (Intermediate Algebra-ILE). Students taking courses in subarea B4 shall

- a. Understand and appreciate the varied ways in which mathematics is used in problem-solving.
- b. Understand and appreciate the varied applications of mathematics to real-world problems.
- c. Perform appropriate numerical calculations, with knowledge of the underlying mathematics, and draw conclusions from the results.
- d. Demonstrate knowledge of fundamental mathematical concepts, symbols, and principles.
- e. Solve problems that require mathematical analysis and quantitative reasoning.
- f. Summarize and present mathematical information with graphs and other forms that enhance comprehension.
- g. Utilize inductive and deductive mathematical reasoning skills in finding solutions, and be able to explain how these skills were used.
- h. Explain the overall process and the particular steps by which a mathematical problem is solved.
- i. Demonstrate a sense of mastery and confidence in the ability to solve problems that require mathematical concepts and quantitative reasoning.

**B.5 Implications and Explorations in Mathematics and the Natural Sciences**

(0-3 units)

Courses in this area draw upon, integrate, apply, and extend knowledge and skills previously acquired in subarea B. These courses have a substantial scientific and/or

mathematical content and require completion of appropriate courses in subareas B1-4 as prerequisites to enrollment.

Students taking courses in subareas B5 shall

- a. Integrate themes in mathematics and/or science from cross-disciplinary perspectives.
- b. Solve complex problems that require mathematical and/or scientific reasoning.
- c. Relate mathematics and/or science to significant social problems or to other related disciplines.
- d. When deemed appropriate, apply disciplinary concepts from mathematics and the natural sciences in a variety of settings, such as community-based learning sites and activities.

## **C Arts and Humanities**

(12 units minimum)

Arts and Humanities include Introduction to the Arts (3 units minimum), Introduction to the Humanities (3 units minimum), Explorations in the Arts and Humanities (3 units minimum), and Origins of World Civilizations (3 units minimum).

### **Overall Learning Goals**

After completing course requirements in Area C, students shall

- Cultivate their intellect, imagination, sensibility, and sensitivity through the study of the arts and humanities.
- Understand and explicate major concepts, themes, and imagery found in the arts and humanities and recognize aesthetic qualities and processes that characterize works of the human intellect and imagination.
- Understand how significant works in the arts and humanities respond to and address enduring problems of human existence.
- Appreciate the interdisciplinary nature of the arts and humanities, including disciplines both within and outside the arts and humanities.

### **C.1 Introduction to the Arts (3 units minimum)**

Students taking courses in subarea C1 shall

- a. Understand and appreciate the visual and performing arts.
- b. Become cognizant of the various aesthetic and non-aesthetic values that have contributed to the development of civilization.
- c. Recognize and analyze the social, historical, and cultural significance of great works of human imagination, including those in the culturally diverse contemporary world.

- d. Cultivate, both emotionally and intellectually, an understanding of the interrelationship between the self and the creative arts through the study of the arts or through experiencing the arts, including for example, attending dance recitals, concerts, and plays, and visiting art sites such as museums.

Although courses in area C1 may include creative activities on part of the student, these courses may not exclusively emphasize skills development and must contain a substantial cultural component.

## **C.2 Introduction to the Humanities** (3 units minimum)

Students taking courses in subarea C2 shall

- a. Cultivate their intellectual reasoning skills, expand their capacity for creative imagination, develop their reasonable moral sensibilities, and increase their capacity for sensitive engagement through studying great works of human imagination and reason (which are to be primarily—although not exclusively—written texts and literature).
- b. Understand how the humanities have contributed to the development of culture, including the comparative study of the humanities in diverse cultures.
- c. Understand how the humanities have sought to provide answers to complex problems facing humanity, including the relationship of the self to culture and the natural world, the nature of moral and legal obligations, and the meaning and purpose of human existence.

Classes may be conducted in languages other than English if they meet the above goals. Such courses must contain a substantial cultural component (e.g., literature, among other content) and shall not focus solely on the acquisition of language skills.

## **C.3 Explorations in the Arts and Humanities** (3 units minimum)

Students may fulfill this requirement by taking any course in area C.3. Although courses approved for C.3 will typically meet either the goals for C.3.a, Exploration in the Arts, or C.3.b, Explorations in the Humanities, some interdisciplinary courses may draw upon the learning goals from both areas.

### **C.3.a Explorations in the Arts**

Courses in this subarea shall draw upon, integrate, apply, and extend knowledge and skills previously acquired in subareas C.1 and C.2. Completion of subarea C.1 shall be required as a prerequisite for all courses in C.3 a. The learning goals for subarea C.3.a include the learning goals for subarea C.1. In addition, students taking courses in subarea C.3.a shall

- i. Gain visual and performance literacy through the scholarly observation of culturally and historically significant art with an emphasis on the endeavor of the artist/creator.

- ii. Cultivate an understanding of a work of art that embodies an objective as well as subjective response to the aesthetic experience, defend an informed opinion, and communicate their view to others.
- iii. Relate the arts to significant social problems.
- iv. Understand the broad, unifying themes in the arts from a wide array of perspectives.
- v. Deepen previously acquired artistic appreciation and understanding through participation either in making or performing of art forms or through the experience of such a process by direct observation.

Although courses in area C.3.a may include creative activities on part of the student, these courses may not exclusively emphasize skills development and must contain a substantial cultural component.

### **C.3.b Explorations in the Humanities**

Courses in this subarea shall draw upon, integrate, apply, and extend knowledge and skills previously acquired in subareas C.1 and C.2. Completion of subarea C.2 shall be required as a prerequisite for all courses in C.3.b. The learning goals for subarea C.3.b include the learning goals for area C.2. In addition, students taking courses in subarea C.3.b shall

- i. Understand broad, unifying themes from cross-disciplinary perspectives in the humanities.
- ii. Understand the relevance of the humanities for the thoughtful consideration of complex contemporary problems.
- iii. Appreciate the complex relationship and interaction between the humanities and other fields of learning, including the natural sciences, social sciences, and arts.

Classes may be conducted in languages other than English if they meet the above goals. Such courses must contain a substantial cultural component (e.g., literature, among other content) and shall not focus solely on the acquisition of language skills.

### **C.4 Origins of World Civilizations (3 units minimum)**

Students taking courses in subarea C4 shall

- a. Acquire a holistic understanding of the origins and historical development of world civilizations to 1500, including the contributions of religion, language, philosophy, material and non-material culture and their interaction with the environment.
- b. Describe and critically analyze the reciprocal influence of institutions, values, and ideas upon each other within and between various cultures.
- c. Understand and describe critically major political, economic, intellectual and cultural themes that recur throughout history.

- d. Critically engage with source material, including these from the canon of world literature, art, and archaeology.

## **D Social Sciences**

(15 units minimum)

Social Sciences include Introduction to the Social Sciences (3 units minimum), World Civilizations and Cultures (3 units minimum), American History, Institutions, and Values (3 units minimum), American Government (3 units minimum), and Explorations in Social Sciences (3 units minimum).

### **Overall Learning Goals**

After completing course requirements in Area D students shall:

- Understand the ways that social, political, and economic institutions and human behavior are interconnected.
- Understand problems and issues from respective disciplinary perspectives and examine issues in their contemporary as well as historical settings and in a variety of cultural contexts.
- Understand the principles, value systems, ethics, and methodologies employed in social science inquiry.
- Understand the ways cultures construct social differences, such as those based on ethnicity, gender, race, class, and sexual orientation, and their effects on the individual and society.

### **D.1 Introduction to the Social Sciences (3 units minimum)**

Students completing courses in subarea D.1 shall

- a. Understand the purpose of the social sciences and the distinguishing features of the social sciences.
- b. Understand and explain major social science concepts, methods, and theories and apply them to concrete problems of contemporary society.
- c. Reflect on what it means to be a social, historical, cultural, psychological, and political being.
- d. Reflect on their own social, cultural, and political experiences in light of social science concepts, methods, and theories.
- e. Understand the integrated nature of social, political, and economic behaviors and institutions in different geographical and historical contexts.
- f. Understand processes of social, political, and cultural change and differentiation in a variety of cultural contexts.

**D.2 World Civilizations and Cultures (3 units minimum)**

Students completing courses in Subarea D.2 shall

- a. Understand the forces that shaped the modern world from 1500 and the emerging factors that contribute to a multipolar world order.
- b. Understand the recurring themes in the development of diverse cultures and societies since 1500, including the socio-economic, political, cultural, and environmental impacts of colonialism, industrialism, nationalism, and globalization.
- c. Recognize and understand the encounter, interaction, clash, and accommodation of various political, religious, ethnic, and gender groups and their contributions to past and present societies.
- d. Critically engage with source material, including original records, eyewitness accounts, memoirs, newspapers, surveys, statistics, film, and scientific treatises.

**D.3 American History, Institutions, and Values (3 units minimum)**

Students completing courses in subarea D.3 shall

- a. Recognize the significance of cultural, intellectual, ethical, economic, and political struggles that have shaped American society over time.
- b. Understand critically the historical development of American institutions and values and their impact on the individual and collective lives of Americans.
- c. Recognize the significance of the interaction of ethnic and other social groups to the historical development of American society, institutions, and values within contexts of accommodation and resistance.
- d. Understand critically how government under the Constitution of the United States has shaped American society.
- e. Critically situate changes in American society within the context of global events.
- f. Analyze primary source materials, engage in critical and constructive discussions, and communicate effectively in writing.

**D.4 American Government (3 units minimum)**

Students completing courses in subarea D.4 shall

- a. Assess critically how the Constitution of the United States and government under the Constitution have shaped American democracy and contemporary American society.
- b. Understand critically the political culture of citizen participation, including political parties, pressure groups, public opinion, and the electoral process.
- c. Assess critically the Constitutions of the United States and of California, and the operation of representative democratic government under those Constitutions.

- d. Explain the processes and interaction between and among local, state, and national governments, with particular reference to California.
- e. Understand critically the structures, functions, and processes of the three branches of government and resulting public policies.
- f. Assess critically behavioral and institutional practices in United States and California politics.

#### **D.5 Explorations in Social Sciences (3 units minimum)**

Because courses in subarea D.5 build upon the learning goals in D.1, completion of subarea D.1 shall be required as a prerequisite for all courses in D.5. In addition, students completing courses in subarea D.5 shall

- a. Examine problems, issues, and themes in the social sciences in greater depth; in a variety of cultural, historical, and geographical contexts; and from different disciplinary and interdisciplinary perspectives.
- b. Analyze and critically evaluate the application of social science concepts and theories to particular historical, contemporary, and future problems or themes, such as economic and environmental sustainability, globalization, poverty, and social justice.
- c. Analyze and critically evaluate constructs of cultural differentiation, including ethnicity, gender, race, class, and sexual orientation, and their effects on the individual and society.
- d. Apply theories and concepts from the social sciences to address historical, contemporary and future problems confronting communities at different geographical scales, from local to global.

### **E. Lifelong Learning and Self-Development**

(3 units minimum)

Courses in Lifelong Learning and Self-Development provide the opportunity to equip learners for lifelong understanding and development of themselves as integrated physiological, social, and psychological beings.

To accomplish this goal, students would:

1. Further their own critical self-understanding and acquire the knowledge, skills, and attitudes necessary to engage and reflect in learning and self-development practices.
2. Develop strategies to be integrated physiological, socio-cultural, and psychological beings to promote a holistic awareness of lifelong learning throughout their lives.
3. Actively apply and participate in developing a lifelong commitment to health for both personal well being (such as physical, financial, emotional, intellectual, spiritual, social/interpersonal, and/or environmental aspects) and societal responsibility.

4. Develop themselves as responsible citizens, employees and employers, family members and members of the global society.

Examples of relevant topics in Area E include, but are not limited to:

- Human behavior
- Sexuality
- Nutrition
- Physical and mental health
- Stress management
- Financial literacy
- Social and political relationships
- Environmental sustainability
- Implications of death and dying
- Media literacy

## **Z. Cultural Diversity**

(3 units minimum)

Courses that satisfy the Cultural Diversity requirement must include all of the following learning goals and in addition be approved GE courses in subareas C.3 (Explorations in the Arts and Humanities), D.5 (Explorations in the Social Sciences), or Area E (Lifelong Learning and Self-Development). Students completing courses in Area Z shall

1. Demonstrate understanding that culture is socially constructed and fundamental to social interaction.
2. Demonstrate appreciation of the complex relationships that various factors such as gender, ethnicity, race, sexual orientation, religion, and class bring to a discussion of society and culture.
3. Demonstrate understanding that because we live in an inter-connected world, we need to understand the diversity and relationships within and among cultures.
4. Recognize and evaluate how one's cultural history affects one's sense of self and relationship to others.

Courses in General Education that meet these learning goals will be identified by a star (\*) in appropriate publications.

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