

GENERAL EDUCATION PROGRAM LEARNING OUTCOMES

In keeping with the mission of CSUDH to "provide education, scholarship and service that are, by design, accessible and transformative," our General Education (GE) program seeks to provide foundational learning opportunities that help students make deep connections and find personal meaning that propels them throughout their education and life beyond the university. The Association of American Colleges and Universities calls this a liberal education; or, one in which students are free "to seek after the truth unencumbered by dogma, ideology, or preconceived notions." Additionally, one with a liberal education can be "both broad-and open-minded, and is, therefore, less susceptible to manipulation or prejudice." (AAC&U, 2020) A General Education program provides a wide range of pathways for students to explore multiple ideas, perspectives, ways of knowing, and problems while also situating themselves in relation to this broader learning through various disciplines both as a student and a member of their community and the world.

Through GE, CSUDH students will take part in learning experiences that support growth toward 8 **learning outcomes**:

1. **Metacognition:** Critically reflect on past experiences to explore and direct their own learning;
2. **Critical Inquiry:** Learn to use critical inquiry skills and then apply these fundamental tools to a variety of qualitative or quantitative reasoning contexts;
3. **Communication:** Effectively use oral, written, creative, and digital modes of communication relevant to audience, purpose and context;
4. **Information Literacy:** Locate, evaluate, and incorporate information applicable to a particular field or inquiry;
5. **Race, Equity and Social Justice:** Examine societal, cultural, and historical contexts of race, class, gender, and sexualities in order to understand the differential and intersectional impacts of racism, oppression, and social inequality on individuals and groups in the United States;
6. **Integrative Learning and Problem Solving:** Address complex ideas and questions by drawing from and synthesizing a range of relevant disciplinary ideas, principles, and methods;
7. **Global Perspectives:** Critically analyze and engage with complex interdependent global systems and legacies and understand their implications for people's lives; and,
8. **Community Engagement:** Think critically about their roles and responsibilities as stakeholders in communities at the campus, local, national, and global levels in order to engage in mutual exchange of knowledge.

Together these outcomes should allow for students to develop a well-rounded foundation for their studies that promotes their identities, strengths, and values while engaging with diverse voices and perspectives throughout their university and community.

The General Education Program requires 49 semester units: (A) 9 units of English Language Communication and Critical Thinking; (B) 13 units of Scientific Inquiry and Quantitative Reasoning; (C) 12 units of Arts and Humanities; (D) 9 units of Social Sciences, (E) 3 units of Lifelong Learning and Self-Development; and (F) 3 units of Ethnic Studies

Area A: English Language Communication and Critical Thinking (9 units)

Courses in Area A introduce students to college-level skills necessary for their continued success at the university and after graduation. Area A courses refine students' abilities to read and write effectively in a variety of rhetorical situations; to distinguish sound, forceful reasoning from faulty reasoning; to publicly present their own ideas and research; and to locate, interpret, evaluate, and effectively and ethically use source materials. Because of the foundational nature of these courses, students must complete this section of General Education within their first 60 units. Students must earn a grade of C- or better in Area A courses in order to satisfy these GE requirements. Skills acquired in Area A courses will be developed further in other GE and major courses.

A1. Oral Communication

Students who complete the Basic Skills requirement in Oral Communication will be able to:

1. discuss the elements of oral communication, including basic rhetorical strategies in speech;
2. give lucid, logical and persuasive speeches in a variety of contexts;
3. display self-confidence in interpersonal and group communication;
4. utilize effective delivery techniques; and
5. listen to and analyze the effectiveness of other speakers.

Students are exempted from the Basic Skills course in Oral Communication by a suitable score on a challenge examination.

A2. Written Communication

Students who complete the English, Communication, & Critical Thinking requirement in Composition will develop proficiency in oral and written communication in English. In particular, they will be able:

1. to define and apply key rhetorical concepts through analyzing and composing a variety of texts in several genres and modes (print, visual, digital, oral, multimodal);
2. to demonstrate rhetorical awareness and flexibility by discussing how other writers adapt language for audience, situation and purpose and by consciously adapting their own writing to a variety of situations and contexts that call for purposeful shifts in voice, tone, style, design, medium, structure, and conventions;
3. to compose persuasive arguments that articulate a clear, thoughtful position, deploy support and evidence appropriate to audience, situation, and purpose, and consider counterclaims and multiple points of view;
4. to demonstrate awareness of writing as a recursive, social process by reading, writing, and collaborating to discover and deepen ideas, reflecting on their rhetorical choices, and revising those choices in response to feedback from readers;
5. to identify how and why conventions vary by genre, discipline, and occasion and use resources to effectively employ appropriate formatting, style, citation, and grammar conventions;
6. to demonstrate awareness of proper citation conventions and their relation to concepts of intellectual property and authorial responsibility;
7. to practice and demonstrate the ability to use conventions of Standard Written English in order to communicate with academic and professional audiences.

Students are exempted from Basic Skills courses in English Composition by a suitable score on the Advanced Placement Test, the English Equivalency Examination, or a composition challenge examination.

A3. Logical/Critical Reasoning

Students who complete the Basic Skills requirement in Logic/Critical Reasoning will be able to:

1. understand basic logic and its relation to language; elementary inductive and deductive process, including an understanding of the fallacies of language and thought;
2. recognize the differences between assumptions, inferences, conclusions, facts and opinions;
3. develop the abilities to analyze, criticize, and advocate ideas; to reason inductively and deductively, and to reach well-supported factual or judgmental conclusions; and
4. apply the concepts and skills of critical reasoning to solve academic and everyday problems.

Students are exempted from the Basic Skills course in Logic/Critical Reasoning by a suitable score on a challenge examination.

NOTE: In Area A, all courses must be passed with a grade of "C-" or higher. In all other areas of General Education, a grade point average of 2.0, calculated at graduation, is required.

Area B: Scientific Inquiry and Quantitative Reasoning (13 units)

In Area B1-3 courses, students develop their knowledge of scientific theories, concepts, and data about both living and non-living systems, as well as an understanding and appreciation of scientific principles and the scientific method, including the potential limits of scientific endeavors. Scientific literacy also includes the ability to think in an informed manner about social, legal, ethical, and political issues that involve science and technology.

In Area B4 courses, students will engage with meaningful mathematics and will be prepared for Science, Technology, Engineering, and Math courses, for quantitative courses in other majors, and to solve problems of everyday life. Students must earn a grade of C- or better in Area B4 courses in order to satisfy these GE requirements; skills acquired in Area B4 courses will be developed further in other GE and major courses.

B1. Physical Science

Students will learn the methods of the natural sciences as these methods are seen and used by working scientists. In addition, they will explore the characteristic attributes of fundamental scientific concepts from the perspective of the natural sciences. Finally, they will learn the structure and results of a fundamental, comprehensive physical science, which is principally analytic, quantitative and deductive.

Students who complete the Natural Science in Physical Science requirement will be able to:

1. demonstrate an understanding of the scientific assumption that nature has an objective existence that is intelligible;
2. distinguish between a scientific hypothesis and the idea of pseudoscience;
3. describe the systematic observation of nature and the detection of similar patterns in observed phenomena;

4. describe the importance of limitation of scope in the production of useful concepts and the related limits to the applicability and usefulness of scientific models and concepts;
5. describe the formulation of hypotheses and models to explain these patterns and the use of these models and hypotheses to make testable predictions;
6. discuss the roles of quantitative and of formal manipulation of models and relationships in generating predictions;
7. discuss the design and execution of tests of hypotheses and the subsequent rejection, modification, or refinement of the hypotheses; and
8. describe the relationship between scientific ideas and their technological applications;
9. understand and appreciate applications, advantages, and limitations of computational methodology in Physical Science, in particular, in the modeling process.

B2. Natural Sciences in Life Science

Students who complete the Natural Science in Life Science requirement will be able to:

1. describe a representative selection of fundamental concepts and principles of the life sciences;
2. cite various phenomena in a variety of contexts that illustrate the applicability of specific principles of the life sciences;
3. describe some of the major applications of the principles of the life sciences;
4. describe some of the major effects that the life sciences and related technologies have had on societies.

B3. Natural Sciences in Science Laboratory

Students who complete the Natural Science in Science Laboratory requirement will be able to:

1. discuss application of a representative selection of fundamental concepts and principles of a science;
2. apply the scientific method in a laboratory situation; and
3. cite various phenomena that illustrate the applicability of specific principles of a science.

B4. Basic Skills in Quantitative Reasoning and Problem Solving

Students who complete the Basic Skills requirement in Quantitative Reasoning and Problem Solving will be able to read and understand mathematical arguments and data, and use mathematics effectively to analyze and solve problems that arise in ordinary and professional life. They shall develop skills and understanding beyond the level of intermediate algebra. In particular, students will:

1. understand and apply ideas and techniques of finite mathematics such as consumer mathematics probability, statistical analysis, hypothesis testing, linear programming, **or**

2. understand and apply the ideas and techniques of college algebra, trigonometry, logarithms and exponentials, and elementary functions, **or**
3. understand and apply ideas and techniques of calculus.

Students in area B4 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.

Students are exempted from the Basic Skills course in Quantitative Reasoning if they receive a suitable score on a challenge examination or if they successfully complete a course requiring more advanced mathematical ability.

B5: Integrative Studies in the Natural Sciences

Courses in Integrative Studies in the Natural Sciences and Technology are interdisciplinary courses that build upon the knowledge students have acquired by completing their lower division coursework in the natural sciences and technology. While these courses will include content from disciplines outside the natural sciences and technology, their primary focus is on integration of knowledge within the natural sciences and technology.

Students who complete the requirement for Integrative Studies in the Natural Sciences will be able to:

1. discuss the relationship of science to humanity through inquiry into: the origin of scientific discovery, the implications and consequences of scientific and technological development, and the impact of natural processes on the works of people as well as on its result: artifact;
2. describe some of the major effects that science and technology have had on societies; and
3. discuss the interdisciplinary approaches to methods, processes, effects, terminology and major concepts of science and technology; and
4. describe and discuss ethical and legal concepts and issues related to science and technology, in particular, the concept of intellectual property and its protection.

Area C: Arts and Humanities (12 units)

In Area C courses, students develop an understanding and appreciation of the works of the human mind and imagination. Arts and Humanities coursework explores the rich history and diversity of human knowledge and creativity as expressed in the arts, literatures, religions, and philosophies of their own and other cultures. By viewing such human endeavors in an historical and aesthetic context, students learn not only to analyze critically but also to value the rich cultural products of our complex world. Area C courses educate students to be global citizens who are equipped to make independent judgments using their own imagination and reason.

General Education courses in the arts and humanities meet one or more of the following goals for students:

1. Cultural knowledge - Students will become acquainted with significant works of art, literature, music and philosophy from a range of cultures.

2. Historical knowledge - Students will understand the development over time of their own and other cultures.
3. Aesthetic training - Students will, through direct experience of works of music, art, and literature, learn the bases on which such works are studied, and the critical canons applied to them, extending their understanding beyond personal opinion to critical evaluation.
4. Opportunities for creativity - Students will create musical, artistic, or literary works, with the opportunity to have their work evaluated by peers and/or a faculty member applying appropriate critical criteria.
5. Synthesis - Students will develop an understanding of the relationships among various forms of human expression both within an era and culture and across these boundaries.

Upper division General Education courses in the arts and humanities build on that base, developing integrated humanistic and ordered world-views.

Students who complete the requirement for Integrative Studies in the Humanities will be able to:

1. discuss the relationships among the various disciplines that comprise the humanities;
2. place these relationships within an historical context;
3. relate the humanities to modern life; and
4. demonstrate the use of imagination and synthesis through aesthetic and intellectual activities.

The 12-semester unit package of courses listed under program requirements has been designed so that students completing these courses will meet the above 5 objectives. At the same time the package offers the student an opportunity for some individual choice in course selection.

Area C excludes courses that exclusively emphasize skills development.

Area D: Social Sciences (9 units)

Courses in the Social Sciences help students better understand how social, political, and economic institutions and behavior are intricately interwoven. In an increasingly complex, interdependent, and changing world, individuals must learn how to cope with pressing social problems and how to manage and improve the conditions, institutions, and outcomes that affect them. Area D courses introduce students to the primary structural levels of analysis used in the various disciplines and demonstrate the significance of historical backgrounds to contemporary behavior.

D1. Individual Perspectives, Groups and Society (3 units)

On completing a course in this category a student will be able to demonstrate an understanding of the:

1. basic concepts and methods necessary for studying the personal functioning and social behavior of individuals.
2. influence of psychological and social processes on the development of the perception of self and others.
3. nature of cognition and language and their relationship to critical aspects of social and personal development.
4. social and psychological variations in individual behavior.

5. conceptual and methodological frameworks necessary for studying groupings in a society.
6. interrelationships between various institutions and group dynamics within a society, and their role in generating and resolving social issues.
7. cultural and group diversity and applications of the concept of cultural relativity.

D2. Global and Historical Perspectives (3 units)

On completing a course in this category, a student will be able to demonstrate an:

1. awareness of and knowledge about the international system and world environment.
2. understanding of the global interdependencies among people, outlooks, institutions and attributes.
3. appreciation of the role of the individual as an international observer, analyst and participant.
4. ability to analyze historical change and cultural process.
5. understanding that current issues and conditions are shaped by their past historical and cultural development.
6. understanding of the complexity of evolutionary and historical processes and of the limits on and potential for social change.
7. understanding of how sciences which deal with the human past formulate and test hypotheses to understand change and how they evaluate sources, whether human fossils, artifacts or written documents.

D3. Integrative Studies in the Social Sciences (3 units - upper division)

The categories of upper division courses in the social sciences represent integrative themes and contemporary research applications. Focusing on specific topics, students will explore the conceptual and methodological links among the social sciences or subfields of a discipline. Courses will stress contemporary research, interpretations, issues and trends. Specific objectives of the categories are as follows:

1. Courses in individual processes focus on the interaction among factors that shape the individual.
2. Courses in social issues focus on contemporary social, political or economic concerns and problems using a variety of perspectives in the social sciences.
3. Courses in global trends focus on social, political, environmental and economic processes seen from a global perspective.
4. Courses in social change focus on major processes of continuity and development and on the origination and impact of new ideas, social structures and technologies.
5. Courses in cultural pluralism focus on the nature of cultural diversity and the processes of cultural interaction, interethnic relations and cultural integration on community, national and international scales.

Students must take 9 units from the GE category. Select one course from each category below and one more course from either category 1 or 2. A student may not take all 3 courses in this area from a single academic department.

Area E: Lifelong Learning and Self-Development (3 units)

Area E courses are designed to equip learners for lifelong understanding and development of themselves as integrated physiological, social, and psychological beings. Drawn from a wide range of disciplines and perspectives, Area E courses focus on the development of skills, abilities, and dispositions that not only promote students' academic success but also enhance their lives after college.

Students who complete the Lifelong Learning and Self-Development requirement will be able to:

1. Demonstrate an understanding of oneself as an integrated physiological, social and psychological organism; and
2. Discuss key relationships of humankind to the social and physical environment, including matters selected from the following: human behavior, sexuality, nutrition, physical and mental health, stress management, financial literacy, social relationships and relationships with the environment, implications of death and dying and avenues for lifelong learning, including those based on modern technology.

Area F: Ethnic Studies (3 units)

Courses in Area F explore the interrelatedness and intersection of race and ethnicity with class, gender and sexuality and other forms of difference, hierarchy and oppression. Courses are grounded and centered in the cultures, concrete-lived conditions, and living histories of peoples of color in the United States. Courses have an explicit commitment to linking scholarship, teaching and learning to intellectual traditions and scholarly contributions of ethnic studies, social engagement (service and struggle), social change, and social justice.

1. Analyze and articulate concepts such as race and racism, racialization, ethnicity, equity, ethnocentrism, eurocentrism, white supremacy, self-determination, liberation, decolonization, sovereignty, imperialism, settler colonialism, and anti-racism as analyzed in any of the following disciplines: Africana Studies, Asian Pacific Studies, Chicana and Chicano Studies, and Indigenous Peoples of the Americas.
2. Apply theory and knowledge produced by Native American, African American, Asia American and Pacific Islander, Chicana and Chicano, and/or LATina and LATino communities to describe the critical events, histories, cultures, intellectual traditions, contributions, lived-experiences and social struggles of those groups with a particular emphasis on agency and group-affirmation
3. Critically analyze the intersection of the race and racism as they relate to class, gender, sexuality, religion, spirituality, national origin, immigration status, ability, tribal citizenship, sovereignty, language, and/or age in Native American, African American, Asian American and Pacific Islander, Chicana and Chicano, and/or LATina and LATino communities.
4. Critically review how struggle, resistance, racial and social justice, solidarity, and liberation as experienced, promoted and enacted by Native American, African American and Pacific Islander, Chicana and Chicano, and/or Latina and Latino communities are relevant to current and structural issues such as communal, national, international, and transnational politics as, for examples, in immigration, reparations, settler-colonialism, multiculturalism, and language policies.

5. Describe and actively engage with anti-racist and anti-colonial issues and the practices and movements that empower Native American, African American, Asian American and Pacific Islander, Chicana and Chicano, and/or Latina and Latino communities to build a just and equitable society.