General Education Area-Specific Student Learning Outcomes (GESLOs)

The purpose of the GE Area-Specific Student Learning Outcomes is to provide common outcomes for content courses regardless of department or college. Each Area has two types of outcomes: Lower Division (Foundation and Exploration) and Upper Division (UD B, C, D). In addition to incorporating Area outcomes, courses will still need to meet all requirements of the Area as listed in the GE Policy.

Area A: English Language Communication and Critical Thinking

GE Area A1: Oral Communication

Required Learning Outcomes
As measured by students being able to:

1. Develop and employ communication skills appropriate for distinct speaking situations.
2. Implement strategies to manage communication apprehension in diverse speaking contexts.
3. Construct (research, organize, develop, and adapt) effective public messages for delivery to diverse co-cultural audiences in a variety of social settings.
4. Integrate a variety of types of supporting materials to make appropriate reference to information or analysis that significantly supports the presentation.
5. Demonstrate critical "listening" skills and acknowledge the cultural diversity of individual communication styles. Listening is meant in the broadest sense and does not require hearing.
6. Recognize the role of culture in establishing audience expectations for speakers and formulate and practice personalized strategies for balancing cultural identity and audience expectations.

GE Area A2: Written Communication

Required Learning Outcomes
As measured by students being able to:

1. Evaluate and incorporate various strategies, including reasoned argument and evidence, to support ideas expressed in their written work.
2. Organize their writing using audience-appropriate strategies and conventions (e.g. paragraphing, headings, rhetorical arrangement).
3. Employ a writing process that includes invention, drafting, and revision.
4. Demonstrate control of sentence structure, grammar, punctuation, spelling, and mechanics to enhance clarity and credibility.
5. Acknowledge the original ideas of others through proper attribution and citation systems/styles.
6. Integrate credible, relevant sources into written work via summarizing, paraphrasing, and/or quoting to support expressed ideas.
7. Demonstrate critical comprehension of texts by developing accurate summaries, reasoned analyses, and synthesized expressions of their own and others' ideas.

GE Area A3: Critical Thinking

Required Learning Outcomes
As measured by students being able to:

1. Define the basic components of argument, including language, premises, supporting evidence, assumptions, hypotheses, conclusions and implications.
2. Identify fallacious reasoning in inductive, deductive, and non-deductive arguments with the goal of reaching conclusions well-supported according to the standards of the academic discourse community.
3. Evaluate claims and sources for clarity, credibility, reliability, accuracy and relevance.
4. Draw reasonable conclusions based on the analysis and interpretation of information.
5. Construct and present logically sound and well-reasoned arguments in order to defend claims, understand opposing perspectives, and advocate ideas.
6. Recognize their roles as both consumers and creators of information, and the role of copyright in mediating the information environment.

Area B: Scientific Inquiry and Quantitative Reasoning

GE Area B1: Physical Sciences

Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Describe how scientific methodology, including the roles of empirical data, interpretation, idea generation, testing, and revision, undergird scientific descriptions of the physical world.
2. Analyze and solve scientific problems using logic, fundamental principles and laws in the physical sciences, and quantitative analysis including identifying whether additional information is needed.
3. Explain the scientific theories, concepts, and data pertinent to understanding the physical sciences and how these apply to the individual and society.
4. Identify and evaluate the use and limits of models, data, or analytical/computational techniques in addressing specific problems in physical science.

GE Area B2: Life Sciences

Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Describe major scientific theories, concepts, and data about living systems and organisms.
2. Explain key events in the development of science and recognize that science is an evolving body of knowledge.
3. Describe how scientists establish and evaluate theories using scientific methodologies in the life sciences.
4. Apply principles, concepts and methods of the life sciences to challenges facing local and global communities.

GE Area B3: Laboratory Courses

In addition to the Area B1 and B2 outcomes, one of the following outcomes should be addressed.
As measured by students being able to:

1. Use methods from science and/or engineering to perform investigations and to collect data in a lab or field setting.

2. Use appropriate methods to generate and analyze empirical data, draw conclusions about living or physical systems being studied, and critically evaluate the methods, hypotheses, and logic used to understand a system being examined.

GE Area B4: Mathematics/Quantitative Reasoning
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Identify, comprehend, interpret, and communicate quantitative information in a variety of personal, civic, professional, or mathematical contexts, using a variety of mathematical representations (such as numerical tables, graphs, algebraic formulas, diagrams and so on).
2. Reason abstractly and make inferences using the techniques and principles of mathematics or statistics in order to solve problems and answer questions arising in a variety of contexts.
3. Use mathematical, statistical or computational methods strategically to build or apply models (i.e., description of systems using mathematical or statistical language, used for example to make predictions or describe dependence on the systems components) and interpret results in context.
4. Construct viable arguments using the language and ideas from mathematics or statistics.

Upper Division B: Scientific Inquiry and Quantitative Reasoning
Required Learning Outcomes
As measured by students being able to:

1. Identify, comprehend, interpret, and communicate quantitative and/or scientific information, using words, graphics or other mathematical representations (such as numerical tables, algebraic formulas, and so on).
2. Construct viable arguments using the language and ideas from natural, physical or computational sciences, mathematics and/or statistics, making intentional use of the skills developed in lower division GE coursework, such as from area B or from Foundation courses such as oral or written communication or critical thinking.

Supplemental Learning Outcomes
Choose at least one:

a. Logically interpret and make inferences from the principles of the natural or physical sciences to solve problems and answer questions arising in the area of study.
b. Explain how the scientific approach and data apply to problems impacting the individual and society.
c. Reason abstractly and make inferences using logic and the techniques and principles of mathematics and statistics, in order to solve problems and answer questions arising in the area of study.

Area C: Arts and Humanities

GE Area C1: Arts (Arts, Cinema, Dance, Design, Film, Music, Theatre)
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Discuss aesthetic experiences subjectively and objectively.
2. Assess and articulate the role and impact of the creative arts in culture and on the interrelationship of self and community.
3. Identify, apply, and describe artistic conventions and aesthetic criteria within creative practice(s).
4. Research, select, and apply relevant aesthetic criteria and artistic conventions in discussing, writing about, and analyzing creative works.

GE Area C2: Humanities (Literature, Philosophy, Languages other than English)
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Explain how their self-understanding is expanded by the distinct perspectives on the human experience offered by disciplines in the humanities.
2. Analyze and assess ideas of value, meaning, and knowledge, as produced within the humanistic disciplines.
3. Demonstrate abilities to engage and reflect critically upon intellectual traditions and creative developments within the humanities.
4. Demonstrate critical thinking in the evaluation of sources and arguments in scholarly works in the humanities.

Upper Division C: Arts and Humanities
Required Learning Outcomes
As measured by students being able to:

1. Research and analyze works of the human imagination and/or the history of thought through diverse cultural perspectives and/or artistic traditions.
2. Use the traditional methods and constructs of the disciplines in the arts and humanities to distinguish and examine multiple aspects of the human condition.
3. Create organized written analytical responses to communicate ideas about cultural practices, literary texts, languages, and/or works of art.

Supplemental Learning Outcomes
Choose at least one:

a. Describe, evaluate, explain, and draw on problems, issues, and/or concerns addressed by the arts and humanities to analyze and/or create works of art or design
b. Demonstrate critical thinking in the evaluation of sources and arguments in scholarly works in the humanities.

Area D: Social Sciences

GE Area D1: US History
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Apply historical knowledge and historical thinking to contemporary issues.
2. Examine patterns of change and continuity relative to the historical development of the U.S. by reference to its founding documents and the institutions and ideals that have fostered the nation's representative government and democratic ideals.

3. Analyze U.S. history through multiple perspectives, including but not limited to social phenomena, cultural referents, political institutions, and economic systems.
4. Identify and describe the causes and consequences of significant political, cultural, economic, and social phenomena that have shaped the development and functioning of U.S. political institutions and ideals over a period of not less than 100 years.
5. Identify and interpret primary and secondary historical sources and use them as evidence in support of an historical argument.

GE Area D2: Constitution and American Ideals
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Describe the major features of the United States Constitution, including its underlying political philosophy and the rights and obligations of citizens under that Constitution, as amended and interpreted.
2. Develop the knowledge and skills necessary to engage in effective political participation and citizenship to improve the wellbeing of their communities.
3. Explain the historical development of the structure and operation of U.S. political institutions and processes, including the relationship of federal, state and local governments and the evolution of federal-state relations.
4. Explain the political attitudes and behavior of the population of the U.S. and California, including the role of political parties, campaigns and elections, interest groups, social movements, and the mass media, and the extent to which the diverse populations of the U.S. and California are represented in the political system.
5. Describe the meaning of representation in a democratic system of government and the pathways through which members of U.S. society may seek representation.
6. Describe the constitution of the state of California, the structure and operation of state and local government under that constitution, and the resolution of conflicts and establishment of cooperative processes under the California and U.S. constitutions.

GE Area D3: Social and Behavioral Science and History
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Explain how the interrelationship between human social, political and economic institutions has influenced the development of society.
2. Utilize principles, methodologies, value systems, and thought processes employed in social scientific inquiry to examine cultural endeavors and/or legacies of world civilizations.
3. Discuss the influence major social structures, culture, diversity, economy, politics and other key elements have on individual perception, actions, values and/or institutions.

Upper Division D: Social Science
Required Learning Outcomes
As measured by students being able to:

1. Analyze the key theories, problems and issues at the core of at least one specific social science discipline.

2. Employ the methodology of at least one social science discipline to analyze and understand relevant social phenomena in both contemporary and historical contexts.
3. Use evidence to evaluate and analyze causal arguments, major assertions, assumptions, ethical considerations and value systems in one or more of the social science disciplines.

Supplemental Learning Outcomes
Choose at least one:

a. Apply socially responsive knowledge and skills to contemporary issues confronting local or global communities in a variety of cultural contexts in support of social change.
b. Formulate conclusions by combining examples, facts, or theories from more than one field of study/perspective in the social sciences.

Area E: Lifelong Learning and Personal Development

GE Area E Lifelong Learning and Personal Development
Required Lower Division/Explorations Learning Outcomes
As measured by students being able to:

1. Explain, reflect on, or actively engage in lifelong behaviors conducive to individual health, well-being, or self-development.
2. Demonstrate skills in applying student success strategies, stress management, information literacy, or interpersonal interactions beyond the academic setting
3. Explain the importance of becoming critical thinkers, consumers of information and/or lifelong learners beyond the academic setting.
4. Evaluate self-assessments on personal behaviors (examples: nutrition, exercise, coping strategies, safer sex behaviors, time management) for their impact on well-being.