10.1 Subject Area 1: English Communication
(3 courses; 9 semester, 12-15 quarter units)
Area 1A: One course, English composition, 3 semester/4-5 quarter units;
Area 1B: One course, Critical Thinking/English Composition, 3 semester/4-5 quarter units;
Area 1C: One course, oral communication, 3 semester/4-5 quarter units.
Exception: Area 1C, Oral Communication, is required only for students transferring to the CSU.

10.1.1 Subject Area 1A: English Composition
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.

10.1.2 Subject Area 1B: Critical Thinking and Composition
Successful completion of the course in reading and written composition must be prerequisite to the course in Critical Thinking/English Composition. The second semester of English composition 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. Successful completion of the course in reading and written composition shall be prerequisite to the course in Critical Thinking/English Composition. 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 6000 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.

10.1.3 Subject Area 1C: Oral Communication (CSU Requirement Only)
(One course: 3 semester, 4 quarter units)
Instruction approved for fulfillment of the requirement in oral 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 courses 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. Interpersonal communication courses are not a natural fit in the oral communication area, but a few have incorporated significant faculty-supervised,
faculty-evaluated practice in speaking with others; added at least a small component of traditional rhetoric; and won placement in the oral communication area.

10.2 Subject Area 2: 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-term 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.

Courses approved to fulfill this requirement must focus on quantitative analysis and the ability to use and criticize quantitative arguments. Symbolic Logic, Computer Programming, and survey courses such as Math in Society, were deemed unacceptable to fulfill the Mathematical Concepts and Quantitative Reasoning requirement.

10.3 Subject Area 3 A/B: 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.

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 (Area 3A) and one in the Humanities (Area 3B). 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 (AI) 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.

10.4 Subject Area 4: Social and Behavioral Sciences
(3 courses: 9 semester, 12-15 quarter units); from at least two academic disciplines.

The Social and Behavioral Sciences requirement shall be fulfilled by completion of at least three courses dealing with individual behavior and with behavior in human social, political, and economic institutions; the three courses must be in a minimum of two academic 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 men, 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 members of various ethnic or cultural groups as part of such 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 4. However, a California Government component is required for the CSU AI requirement.

10.5 Subject Area 5 A/B: Physical and Biological Sciences
(At least 2 courses: 7-9 semester, 9-12 quarter units); A minimum of one course in each area is required, and at least one must include a laboratory.

The Physical and Biological Sciences requirement shall be fulfilled by completion of at least two courses, one of which is in Physical Science (Area 5A) and one in Biological Science (Area 5B), 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.

10.5.2 IGETC Laboratory Science Requirement
The IGETC physical and biological science area requires a minimum of two courses, at least one of the two must include a laboratory. The intent of the IGETC laboratory science requirement is that students take at least one physical or biological science course incorporating a laboratory component. Since the experimental methodology and hypothesis testing taught in a lab builds on the principles presented in the lecture portion of the course, the two must be related. Therefore, the laboratory must correspond to one of the lecture courses taken to fulfill this IGETC requirement. A student cannot use lecture courses in two subjects and a laboratory in a third subject. It is expected that the lecture course is a prerequisite or co-requisite of the laboratory course. Lecture and lab courses may have separate course numbers.

10.5.3 Unit Requirement for Laboratory Science Courses
Three semester or four quarter unit laboratory science courses may be used on IGETC to clear the laboratory science requirement as long as the minimum unit value is met for this area (7 semester or 9 quarter units).

**Example A:** 1 biological science w/lab, 3 semester units
1 physical science, 4 semester units
Conclusion: Area 5 satisfied

**Example B:** 1 biological science w/lab, 3 semester units
1 physical science, 3 semester units
1 physical or 1 biological science, 3 semester units
Conclusion: Area 5 satisfied