Appendices

For

Requirements for Baccalaureate Degrees, Majors, Concentrations, Minors, and Certificates

The appendices which follow provide supplemental information for Academic Senate policy S11-255 “Requirements for Baccalaureate Degrees, Majors, Concentrations, Minors, and Certificates. Only the Academic Senate, with approval of the President, can change Academic Senate policy S11-255 or the “Educational Goals for the Baccalaureate at San Francisco State University.” The other items in the appendices below are not Academic Senate Policy documents but provide some context for the intentions of S11-255. Consequently, the Baccalaureate Requirements Committee may make changes in the wording of course expectations, student learning outcomes, or extended descriptions or examples of requirements, without sending those changes to the Academic Senate for review, provided the changes do not call for changes in the policy document.

The BRC approved the following changes to the course expectations and/or student learning outcomes of the following areas:

- Area A2 and A4 on January 22, 2013,
- Area B1, B2, B3 and UD-B on May 3, 2012
- Area B4 on September 13, 2012.
- The designations for Area C2 (Humanities: Literature) and Area C3 (Humanities) were exchanged to facilitate implementation of the program on January 17, 2014.
- Upper division American Institutions on October 11, 2012.
- Area E (Lifelong Learning and Self-Developments on September 27, 2012
- Overlays (AERM, ES, GP and SJ) on February 23, 2012

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Appendix A:
Educational Goals for the Baccalaureate at San Francisco State University

Endorsed by the Academic Senate on March 11, 2008

San Francisco State University undergraduates will emerge from their studies with a breadth and depth of knowledge and understanding developed from integrating their course work and academic experiences in both general education and in the major. The abilities, knowledge, and qualities of mind fostered by general education will be reinforced, extended, and deepened in the major. Students should pursue a secondary focus in addition to their major (e.g., a second major, minor, certificate). We expect the following interconnected educational outcomes from a baccalaureate of San Francisco State University:

1. Competencies for Lifelong Intellectual Endeavor: San Francisco State University's baccalaureate graduates will be competent in critical questioning and analysis, creative and independent thought, attentive reading and interpretation, written and other forms of communication, quantitative reasoning, research drawing upon a variety of resources, problem solving, and collaboration. Students should have knowledge of a language other than English.

2. Intellectual Attainments: Graduates will be conversant with the principal domains of knowledge associated with liberal learning: the sciences and mathematics, the social sciences, the humanities, and the arts. They will be able to apply the modes of inquiry associated with these domains and will have engaged questions and issues of enduring importance. They will also gain in-depth knowledge and understanding of at least one major course of study. These competencies and attainments will provide graduates with intellectual foundations for careers or for advanced study.

3. Appreciation of Diversity: Graduates will know, understand, and appreciate multiple forms and variations of human diversity, both within the United States and globally. Graduates will respect themselves and others. They will have obtained a historical perspective about the development of our diverse nation and will be able to engage in informed, civil discourse with persons different from themselves in intellectual and cultural outlook.

4. Ethical Engagement: Graduates will have an appreciation of the necessity and difficulty of making ethical choices, both private and public, and will be able to identify and analyze the values that inform those choices. Graduates will demonstrate ethical conduct in their own work and their acknowledgement of the work of others. Graduates will recognize their responsibility to work toward social justice and equity by contributing purposefully to the well-being of their local communities, their nations, and the people of the world, as well as to the sustainability of the natural environment.

5. Integration and Application of Knowledge: Graduates will know how to make connections among apparently disparate forms of knowledge and modes of inquiry across academic disciplines and between the principal domains of knowledge and their majors. They also will be able to place such knowledge and approaches within their cultural,
historical, and sociopolitical contexts. Graduates will be able to apply academic knowledge to what is important in their own lives and to local and global communities.

6. Qualities of Mind and Spirit: Graduates will take with them dispositions that facilitate lifelong learning and growth, including curiosity, a sense of wonder, intellectual flexibility and adaptability, a refusal to simplify what is inherently complex and ambiguous, a sense of responsibility and accountability, critical self-reflection, independence of mind, respect for wellness and healthy living, a readiness to assume leadership roles, and reverence for all that unites us as human beings across time.
Appendix B:  
Course Expectations, Student Learning Outcomes, and Links to Goals for Lower Division General Education

This section includes course expectations and student learning outcomes for Areas A through D in lower division general education and Areas B through D in upper division general education from Executive Order 1033. Courses that meet the student learning outcomes identified for an area will be approved for that area, regardless of the disciplinary designation of the unit originating the proposal. The units specified for a requirement are the minimum number of units required. Courses which require more units (e.g. 4-unit classes instead of 3-unit classes) may be proposed to meet a requirement. The section for each requirement ends with a chart showing how the student learning outcomes for that requirement are linked to the educational goals.

**Lower Division English Language Communication and Critical Thinking (Area A)**

Students take four classes (12 units), one each from A1, A2, A3, and A4. To be used for fulfillment of General Education Requirements, Area A and B4 courses must be completed with a C- or higher grade or a CR grade must be received.

**Course Expectations for Lower Division Oral Communication (A1) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division oral communication (A1) general education requirement,

1. The course must be lower division, open to all students, and may not have prerequisites.

2. At least one of the assignments must be related in some way to one or more of the following topics, drawn from the goals for the baccalaureate at San Francisco State University: (a) human diversity within the United States and/or globally; (b) ethical choices; (c) social justice; (d) the well-being of communities, nations, or the people of the world; (e) the sustainability of the natural environment; (f) applications of academic knowledge to what is important in one’s own life; or (g) what unites us as human beings across time.

3. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing basic search strategies to explore core sources, including library resources; (b) articulating and applying rudimentary criteria in evaluating information and sources; and (c) using and citing properly the information in assignments.

4. Assignments shall foster the understanding and value of academic integrity, and encourage students to take responsibility as an engaged person in various roles: student, learner, professional, and global citizen.

5. Some assignments or classroom activities should encourage the development of skills and strategies for working collaboratively.

6. At least one of the assignments must be related to one of the following: (a) plans for academic or co-curricular experiences on campus; (b) intellectual or social activities of
university life (e.g., performances, exhibitions, lectures, etc.); (c) time and/or stress management; or (d) financial planning including money and credit management during college and/or after graduation.

7. The course syllabus must include references to assignments that are described above as part of the course expectations.

8. The course syllabus must include the university-approved student learning outcomes for oral communication and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

Student Learning Outcomes for Lower Division Oral Communication (A1) (3 units)

After completion of a lower division general education course in oral communication, students will be able to:

1. effectively organize, construct, and deliver prepared and spontaneous presentations to groups of 20 or more, using the following:
   - a plan for acquiring and recording information using basic search strategies to explore core sources, including library resources;
   - careful assessment of claims, supporting materials, and arguments;
   - organizational principles leading to a coherent presentation focused on a main point and a reasonable number of supporting points given time constraints;
   - information and strategies that will facilitate listeners’ understanding;
   - effective delivery techniques for oral communication;
2. articulate principles for making effective technologically-enhanced presentations;
3. effectively listen to prepared and spontaneous discourse by using the following:
   - active listening skills;
   - careful assessment of claims, supporting materials, and arguments;
4. demonstrate skills for working collaboratively, including articulating a perspective, rationale, and exchange of ideas in forming a group goal;
5. demonstrate perspective-taking skills, both as a speaker and a listener;
6. engage in informed civil discourse with persons different from themselves in intellectual and cultural outlook;
7. demonstrate ethical conduct in their communication including such practices as
   - accurate presentation of information;
   - appropriate citation of the ideas and words of others;
   - respectful treatment of others even when disagreeing;
   - acknowledgment of the importance of the privacy and confidentiality of others; and
• acceptance of responsibility for the consequences of one’s discourse;
8. reduce their own speech anxiety and project greater confidence as a speaker; and
9. apply communication principles in their personal lives and their communities.

Links between Educational Goals and Outcomes for Lower Division Oral Communication

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division oral communication. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

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<thead>
<tr>
<th>Educational Goals</th>
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<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<td>3. Appreciation of Diversity</td>
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Course Expectations for Lower Division Written English Communication I (A2) (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division written English communication (A2) general education requirement,

1. The course must be lower division, open to all students, and may not have prerequisites, but the course may use students’ decision on Directed Self-Placement (DSP), exemptions, and/or scores on the Composition for Multilingual Students Placement Test (CMSPT) to designate the appropriate course.
2. The course must be graded on an A, B, C, NC basis.
3. Students will write 6,000-7,000 words of effective expository prose with regard to purpose, audience and genre. There should be an opportunity for practice and feedback with revisions being included in the number of words.
4. Readings will be drawn from a variety of sources from different disciplinary perspectives and integrated throughout the course.
5. Readings will encourage reflection on the self as student, learner, professional and global citizen, and will promote understanding and appreciation of human diversity.
6. At least one assignment must address some aspect of being a college student [e.g., (a) a self-reflection on one’s personal literacy or intellectual history; (b) a review of an on-campus intellectual, social, or artistic event; (c) an exploration of a field of study and its related career opportunities; (d) a research-based analysis of issues facing new college students].
7. At least one of the assignments must be related in some way to one or more of the following topics, drawn from the goals for the baccalaureate at San Francisco State University: (a) human diversity within the United States and/or globally; (b) ethical choices; (c) social justice; (d) the well-being of communities, nations, or the people of the world; (e) the sustainability of the natural environment; (f) applications of academic knowledge to what is important in one’s own life; or (g) what unites us as human beings across time.

8. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing basic search strategies to explore core sources, including library resources; (b) articulating and applying rudimentary criteria in evaluating information and sources; and (c) using and citing properly the information in assignments.

9. Assignments shall foster the understanding and value of academic integrity.

10. The course syllabus must include references to assignments that are described above as part of the course expectations.

11. The course syllabus must include the university-approved student learning outcomes for Written English Communication I and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Written English Communication I**

(A2) (3 units)

After completion of a lower division general education course in Written English Communication I, students will be able to:

1. read actively and effectively and use information acquired from readings, research and other sources critically in their own writing;
2. use writing processes and strategies for generating, revising, editing, and proofreading their own work; collaborate with others during the writing process, developing ways to offer constructive criticism and accept the criticism of others;
3. reflect on their reading and writing processes as an avenue to achieving greater control of these processes and increased effectiveness as readers and writers;
4. demonstrate a basic familiarity with rhetorical conventions, composing effective expository prose with regard to purpose, audience, and genre;
5. create and apply a research plan to locate, use and evaluate information from a variety of sources, including library resources;
6. use evidence and analysis to successfully support the central purpose of their writing; demonstrate ethical conduct in their writing and the appropriate use and citation of the works of others;
7. demonstrate knowledge of genre conventions ranging from structure and paragraphing to tone and mechanics; control such surface features as syntax, grammar, punctuation, and spelling; and
8. use knowledge of the academic community to support their development as learners, readers and writers.

Links between Educational Goals and Outcomes for Lower Division Written Communication I

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division written communication I. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Written Communication I</th>
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<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>4. Ethical Engagement</td>
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Course Expectations for Lower Division Critical Thinking (A3) (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division critical thinking (A3) general education requirement,

1. The course must be lower division, open to all students, and may not have prerequisites.

2. At least one of the assignments must be related in some way to one or more of the following topics, drawn from the goals for the baccalaureate at San Francisco State University: (a) human diversity within the United States and/or globally; (b) ethical choices; (c) social justice; (d) the well-being of communities, nations, or the people of the world; (e) the sustainability of the natural environment; (f) applications of academic knowledge to what is important in one’s own life; or (g) what unites us as human beings across time.

3. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing basic search strategies to explore core sources, including library resources; (b) articulating and applying rudimentary criteria in evaluating information and sources; and (c) using and citing properly the information in assignments.

4. Assignments shall foster the understanding and value of academic integrity, and encourage students to take responsibility as an engaged person in various roles: student, learner, professional, and global citizen.

5. Some assignments or classroom activities should encourage the development of skills and strategies for working collaboratively.

6. The course syllabus must include references to assignments that are described above as part of the course expectations.
7. The course syllabus must include the university-approved student learning outcomes for critical thinking and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Critical Thinking (A3) (3 units)**

After completion of a lower division general education course in critical thinking, students will be able to:

1. understand and articulate basic principles of formal reasoning and their relation to language, and be able to communicate in language that meets the standards of logic;
2. analyze, criticize and advocate ideas;
3. identify common formal and informal fallacies of reasoning, both to avoid these in their own thinking and to criticize these in thinking presented to them;
4. construct elementary valid deductive arguments, including being able to identify and assess overtly expressed premises, suppressed premises, and conclusions;
5. construct elementary sound inductive arguments, including being able to identify and assess hypotheses and evidence;
6. distinguish matters of fact from issues of judgment or opinion, and construct arguments that reach valid or well-supported factual and judgmental conclusions; and
7. demonstrate ethical conduct in reasoning, meeting at least the following standards for respectful participation in the community of learners: accurately stating and not misrepresenting the strength of logical connections, not misleading others regarding the truth status of empirical claims, providing full citation or attribution of other people's views, adhering to the "principle of generosity" in reporting or interpreting other people's views.

**Links between Educational Goals and Outcomes for Lower Division Critical Thinking**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division critical thinking. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

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<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Critical Thinking</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>1, 2, 3, 4, 5, 6</td>
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<tr>
<td>4. Ethical Engagement</td>
<td>7</td>
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**Course Expectations for Lower Division Written English Communication II (A4) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division written English communication II (A4) general education requirement,
1. The course must be lower division and open to all students who have completed twelve or more units and who have completed Written English Communication I or its equivalent with a CR or C- or higher.

2. The course must be graded on an A, B, C, NC basis.

3. Assignments will yield 8000-10,000 words of formal writing and demonstrate college-level proficiency and address topics related to the goals articulated in “Educational Goals for the Baccalaureate at San Francisco State University.” There should be an opportunity for practice and feedback with revisions being included in the number of words.

4. Readings that (a) encourage students to reflect on topics related to the goals articulated in “Educational Goals for the Baccalaureate at San Francisco State University”; (b) come from a variety of sources, such as disciplinary texts, research reports, articles written for the general public, and literature; and (c) draw upon multiple domains of knowledge and engage questions and issues to which multiple disciplines can speak.

5. Assignments will encourage students to make connections across academic disciplines on subjects that have implications for themselves personally.

6. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing advanced search strategies to examine a wide variety potential sources, including library resources; (b) articulating and applying advanced criteria in evaluating information and sources, including distinguishing scholarly/non-scholarly information and primary/secondary sources; and (c) using and citing properly the information in assignments.

7. The course syllabus must include references to assignments that are described above as part of the course expectations.

8. The course syllabus must include the university-approved student learning outcomes for Written English Communication II and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

9. Students will be given opportunities to demonstrate through reading and writing an understanding and appreciation of human diversity both within the United States and globally; and

10. Students will be given opportunities through reading and writing to develop civic responsibility, to work towards social justice and equity, and to explore how they can contribute purposefully to the well-being of their local communities, and/or their nations, and/or the people of the world, as well as to the sustainability of the natural environment.

**Student Learning Outcomes for Lower Division Written English Communication II (A4) (3 units)**

After completion of a lower division general education course in Written English Communication II, students will be able to:

1. use writing to inquire into authentic social issues and enter into scholarly conversations, articulating responsible, informed positions;
2. read, analytically and critically, complex texts from varied cultural and academic frameworks, integrating multiple perspectives;

3. employ advanced search strategies to examine, and advanced criteria to evaluate, a wide variety of sources, including library resources, distinguishing scholarly from non-scholarly and primary from secondary information;

4. adopt task-specific strategies for generating ideas, drafting, editing and proofreading, and revise mindfully, refining ways of giving and using feedback;

5. reflect on their own and others’ literacy processes, strategies and habits in order to build more flexible reading and writing skills;

6. compose rhetorically-aware, complex prose in a variety of genres matched to purpose, audience, and context;

7. use evidence from a variety of sources to support a purpose, distinguishing adequate from inadequate support; use and cite information properly and ethically; and

8. control rhetorical and grammatical features, including style, usage, and conventions, with attention to purpose, audience and genre.

**Links between Educational Goals and Outcomes for Lower Division Written Communication II**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division written communication II. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

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<tbody>
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<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>1, 3, 4, 5, 6, 7, 8, 9</td>
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<tr>
<td>3. Appreciation of Diversity</td>
<td>1</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>2, 10</td>
</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>3</td>
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**Lower Division Scientific Inquiry and Quantitative Reasoning**

*(Area B)*

Students take a minimum of 9 units, including at least one course from B1, B2, B3 and B4. Typically, B3 (a lab course) will be associated with a lecture course in B1 or B2. If not, the course that satisfies Area B3 should be taken concurrently with or following the appropriate lecture course. To be used for fulfillment of General Education Requirements, Area A and B4 courses must be completed with a C- or higher grade or a CR grade must be received.
Course Expectations for Lower Division Physical Science (B1) (3 units)  
[preferably including a lab (see B3) within 3 units]

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division physical science (B1) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of an assessment test to determine readiness for college-level work in the subject (which might include EPT, ESLPT, ELM, or other departmental tests), or an exemption for one or more of these tests. Prerequisite assessments and scores must be available before the semester begins. If results of prerequisite assessment tests are not available to students prior to registration for the course, sample tests or online tutorials will be available to allow students to self-assess their readiness for the course. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year;

2. The syllabus must list the university-approved student learning outcomes for physical science (B1) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes;

3. Students will be taught the steps in the scientific method of inquiry, which involves gathering observable, empirical and measurable evidence subject to specific principles of reasoning. The course will emphasize that the degree of acceptance of a theory by the scientific community grows as the number of reproducible observations of its predictions increases;

4. The utility of alternative scientific hypotheses in the development of scientific theories will be discussed. Examples will be given of how scientific evidence is used to develop hypotheses and theories; and

5. Course content will focus on inquiry into the physical universe.

Student Learning Outcomes for Lower Division Physical Science (B1) (3 units)

After completion of a lower division general education course in physical science, students will be able to:

1. gather and interpret scientific information from a variety of sources and use that information to discuss scientific issues;

2. describe ethical or sociological dilemmas arising out of scientific research and applications, which may include those related to social justice, and may have implications for local and/or global communities;

3. use scientific theories and methods of inquiry to explain phenomena observed in laboratory or field settings; and

4. discuss the relevance of major scientific theories and/or research to modern day life.
Links between Educational Goals and Outcomes for Lower Division Physical Science

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division physical science. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

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<thead>
<tr>
<th>Educational Goals</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>2. Intellectual Attainments</td>
<td>1, 2, 4</td>
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<tr>
<td>4. Ethical Engagement</td>
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<td>5. Integration and Application of Knowledge</td>
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Course Expectations for Lower Division Life Science (B2) (3 units) [preferably including a lab (see B3) within 3 units]

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division life science (B2) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of an assessment test to determine readiness for college-level work in the subject (which might include EPT, ESLPT, ELM, or other departmental tests), or an exemption for one or more of these tests. Prerequisite assessments and scores must be available before the semester begins. If results of prerequisite assessment tests are not available to students prior to registration for the course, sample tests or online tutorials will be available to allow students to self-assess their readiness for the course. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year;

2. The syllabus must list the university-approved student learning outcomes for life science (B2) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes;

3. Students will be taught the steps in the scientific method of inquiry, which involves gathering observable, empirical and measurable evidence subject to specific principles of reasoning. The course will emphasize that the degree of acceptance of a theory by the scientific community grows as the number of reproducible observations of its predictions increases;

4. The utility of alternative scientific hypotheses in the development of scientific theories will be discussed. Examples will be given of how scientific evidence is used to develop hypotheses and theories; and

5. Course content will focus on inquiry into living systems.
Student Learning Outcomes for Lower Division Life Science (B2) (3 units)
After completion of a lower division general education course in life science, students will be able to:

1. gather and interpret scientific information from a variety of sources and use that information to discuss scientific issues;

2. describe ethical or sociological dilemmas arising out of scientific research and applications, which may include those related to social justice, and may have implications for local and/or global communities;

3. use scientific theories and methods of inquiry to explain phenomena observed in laboratory or field settings; and

4. discuss the relevance of major scientific theories and/or research to modern day life.

Links between Educational Goals and Outcomes for Lower Division Life Science
The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division life science. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

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Course Expectations for Lower Division Laboratory Activity (B3) (1 unit; may be an overlay)
To be certified by the Baccalaureate Requirements Committee as meeting the lower-division laboratory activity (B3) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of an assessment test to determine readiness for college-level work in the subject (which might include EPT, ESLPT, ELM, or other departmental tests), or an exemption for one or more of these tests. Prerequisite assessments and scores must be available before the semester begins. If results of prerequisite assessment tests are not available to students prior to registration for the course, sample tests or online tutorials will be available to allow students to self-assess their readiness for the course. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year;

2. Courses satisfying the requirements for Area B3 will typically be associated with a lecture
course in Area B1 or B2. They will ideally be embedded in the lecture course so that no additional units are added, but they may be a separate course with additional units. In the case of a separate laboratory course that is a companion to a lecture course in Area B1 or B2, the co- or pre-requisite may be the corresponding lecture course;

3. The syllabus must list the university-approved student learning outcomes for laboratory activity (B3) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes; and

4. The course will include discussion of how the laboratory work relates to current research in science, the consequences that seemingly minor oversights in accurate recording of data can have, and how scientific principles learned in the lab can apply to situations outside of the laboratory.

**Student Learning Outcomes for Lower Division Laboratory Activity (B3) (1 unit; may be an overlay)**

After completion of a lower division laboratory activity related to a course in Area B1 or B2, students will be able to:

1. apply appropriate methods of analysis to raw data;

2. carry out common laboratory procedures correctly and adhere to instructions on laboratory safety; recognize hazardous situations and act appropriately;

3. maintain a timely, comprehensive laboratory notebook, including any outside or background research, with sufficient detail to permit repeatability of experiments;

4. explain the scientific method, including concepts of hypothesis and experimental controls, and why objectivity is essential; and

5. apply critical thinking in the laboratory and recognize whether results and conclusions make sense.

**Links between Educational Goals and Outcomes for Lower Division Lab Science**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division lab science. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Lab Science</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>2. Intellectual Attainments</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>5</td>
</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>6, 7</td>
</tr>
</tbody>
</table>
Course Expectations for Lower Division Mathematics/Quantitative Reasoning (B4) (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division mathematics (Area B4)

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of an assessment test (which might include ELM or other departmental tests) to determine readiness for college-level work in the subject; the prerequisites can also be fulfilled by an exemption from one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite together with a departmental test to gauge the student’s immediate rustiness and readiness, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year. Prerequisite assessments and scores must be available before the semester begins. If results of prerequisite assessment tests are not available to students prior to registration for the course, sample tests or online tutorials will be available to allow students to self-assess their readiness for the course.

2. The course must have an explicit intermediate algebra prerequisite (which could have been met before coming to San Francisco State University), and students shall develop skills and understanding beyond the level of intermediate algebra.

3. The course syllabus must list the university-approved student learning outcomes for Mathematics/Quantitative Reasoning (B4) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

4. The course must stress the importance of presenting information accurately, applying mathematical models or methods appropriately, respecting the rights and welfare of others when collecting or disseminating quantitative information, and/or presenting information in a manner suitable for those receiving that information.

Student Learning Outcomes for Lower Division Mathematics/Quantitative Reasoning (B4) (3 units)

After completion of a lower division general education course in mathematics/quantitative reasoning, students will be able to:

1. interpret mathematical models such as formulae, graphs, tables, and schematics, and draw inferences from them; represent mathematical information symbolically, visually, numerically, and verbally;

2. interpret and draw conclusions from quantitative materials and use those materials to construct mathematical models;

3. use arithmetical, algebraic, geometric and and/or statistical methods to solve problems; explain and apply mathematical concepts; use computational skills and appropriate technology to carry out mathematical operations;

4. estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results;
Educational Goals versus Student Learning Outcomes for Lower Division Mathematics/Quantitative Reasoning

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<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Mathematics / Quantitative Reasoning</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>1,2,3,4</td>
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<tr>
<td>2. Intellectual Attainments</td>
<td>1,2,3</td>
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<tr>
<td>4. Ethical Engagement</td>
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<tr>
<td>5. Integration and Application of Knowledge</td>
<td>4</td>
</tr>
</tbody>
</table>

**Lower Division Arts and Humanities (Area C)**

Students take a minimum of 9 units, including one course from Area C1, one chosen from Area C1 or C2, and a third from C3.

**Course Expectations for Lower Division Arts (C1) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division arts (C1) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT, ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. The course syllabus must list the university-approved student learning outcomes for arts (C1) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Arts (C1) (3 units)**

After completion of a lower division general education course in arts, students will be able to:

1. appreciate and reflect on specific ways of knowing the world involved in the creation, interpretation, and evaluation of artistic works and performances;

2. evaluate information from a variety of sources and use that information to articulate well-reasoned responses to artistic concerns;

3. appreciate diverse artistic expressions;
4. describe ethical issues arising out of artistic expressions, which may include those related to social justice, and may have implications for local and/or global communities;

5. identify local and/or global cultural, historical, and sociopolitical contexts for artistic expressions; and

6. articulate the relevance of artistic expressions to their lives.

**Links between Educational Goals and Outcomes for Lower Division Arts**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division arts. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Arts</th>
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</thead>
<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>2</td>
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<tr>
<td>2. Intellectual Attainments</td>
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<tr>
<td>3. Appreciation of Diversity</td>
<td>3</td>
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<td>4. Ethical Engagement</td>
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</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>5, 6</td>
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</table>

**Course Expectations for Lower Division Humanities (C2) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division humanities (C2) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT, ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. The course syllabus must list the university-approved student learning outcomes for humanities (Area C2 for Humanities) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Humanities (C2) (3 units)**

After completion of a lower division general education course in humanities, students will be able to:

1. understand how humanistic methods of inquiry, analysis, and interpretation are used to produce and contest knowledge claims about expressive forms, cultural traditions, belief systems, or communicative practices while encouraging reflection on big ideas such as the nature of the good life, how and why cultural traditions change, and the power of imagination to enlarge and invigorate experience;
2. evaluate information from a variety of sources and use this information to formulate well-reasoned responses to major ideas, concerns, and/or debates that animate humanistic study;

3. appreciate diverse expressive forms, cultural traditions, belief systems, or communicative practices;

4. identify ethical issues that arise in expressive forms, cultural traditions, belief systems, or communicative practices, particularly in relation to demands for social justice and in terms of their implications for local and/or global communities;

5. situate expressive forms, cultural traditions, belief systems, or communicative practices in the local and/or global cultural, historical, and sociopolitical contexts in which they were produced; and

6. articulate the relevance to their own lives of expressive forms, cultural traditions, belief systems, or communicative practices.

**Links between Educational Goals and Outcomes for Lower Division Humanities**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division humanities. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
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<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>5. Integration and Application of Knowledge</td>
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</table>

**Course Expectations for Lower Division Humanities: Literature (C3) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division humanities: literature (C3) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT, ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. Courses must include literary texts that differ in form and style, as well as reflect diverse human experiences and perspectives. Courses may also include other kinds of texts and materials that help to inform the analysis and interpretation of literature.
3. The course syllabus must list the university-approved student learning outcomes for literature (C3) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Humanities: Literature (C3) (3 units)**

After completion of a lower division general education course in literature, students will be able to:

1. use humanistic methods of inquiry, analysis, and interpretation to explore the meanings and purposes of expressive forms, cultural traditions, belief systems, or communicative practices, and to grapple with topics of enduring importance such as imagination’s power to enlarge and invigorate experience, how and why cultural traditions change, the nature of what philosophers term “the good life,” and the formation of individual and group identity through social interaction;

2. recognize what counts as textual evidence and pertinent biographical, historical, cultural, and other kinds of information to support well-reasoned claims about the discursive features, purposes, and meanings of literature;

3. appreciate various literary forms and styles as well as literature that reflects diverse human experiences and perspectives;

4. identify ethical themes or dilemmas that arise in literary works, which may relate to demands for social justice and which may have implications for local and/or global communities;

5. situate works of literature in the local and/or global cultural, historical, and sociopolitical contexts in which they were produced; and

6. articulate the relevance of literature and literary studies to their lives.

**Links between Educational Goals and Outcomes for Lower Division Humanities: Literature**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division humanities: literature. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Humanities: Literature</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
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<tr>
<td>5. Integration and Application of Knowledge</td>
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</table>
Lower Division Social Sciences (Area D)

Students take a minimum of 9 units, including one course from Area D1, Area D2, and Area D3.

Course Expectations for Lower Division Social Sciences (D1) (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division social sciences (D1) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT, ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. The course syllabus must list the university-approved student learning outcomes for social sciences (D1) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

Student Learning Outcomes for Lower Division Social Sciences (D1) (3 units)

After completion of a lower division general education course in social sciences, students will be able to:

1. understand how the methods of inquiry and analysis characteristic of one or more of the behavioral and social sciences are used to produce and contest knowledge claims about large-scale issues and questions related to human behavior, socially constructed identities, institutions, economic, political, or social systems, or human societies within and/or across cultures and civilizations;

2. evaluate information from a variety of sources and use this information to formulate well-reasoned responses to major ideas, concerns, and debates in the social sciences;

3. appreciate diversity in human behavior, socially constructed identities, institutions, economic, political, or social systems, and human societies within and/or across cultures and civilizations;

4. identify potential ethical issues related to social scientific research and application, including effects of those issues on research practices and evaluation, individuals, society, and the environment, and where appropriate, implications for social justice and the well-being of local and/or global communities;

5. situate human behavior and social systems in the local and/or global, cultural, historical, and sociopolitical contexts in which they occur; and

6. articulate the relevance of social science theories and research to their lives.

Links between Educational Goals and Outcomes for Lower Division Social Sciences

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division social sciences. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.
### Educational Goals

<table>
<thead>
<tr>
<th>Student Learning Outcomes for Lower Division Social Sciences</th>
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<tbody>
<tr>
<td>Educational Goals</td>
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<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<td>4. Ethical Engagement</td>
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<tr>
<td>5. Integration and Application of Knowledge</td>
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### Course Expectations for Lower Division Social Sciences: US History (D2) (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division social sciences: US History (D2) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT, ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. As mandated by CSU Executive Order 405, the US History component of the American Institutions requirement may be met either by examination (AP, CLEP, or SF State competency exam) or by taking a course meeting the following content requirements and their corresponding student learning outcomes. All courses approved for the US History requirement must cover:
   - significant events occurring in the entire area now included in the United States of America during a period of “a minimum time space of approximately 100 years,” including the relationships among regions within that area and with external regions and states;
   - the role of major ethnic and social groups in such events and the contexts in which the events have occurred, with attention to the multiple heritages of US culture, including Native American peoples and cultures;
   - the events presented within a framework which illustrates the continuity of American experience and its derivation from other cultures including consideration of three or more of the following: politics, economics, social movements, and geography; and
   - basic American values and ideals, including freedom; equality of opportunity, equality before the law, equality of moral regard for each other; and social fairness.
3. The course syllabus must list the university-approved student learning outcomes for US history (D2) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Social Sciences: US History (D2) (3 units)**

After completion of a lower division general education course in US History, students will be able to:

1. understand the interaction and evolution of economic, political, social and cultural processes in the development of the United States;
2. evaluate information from a variety of sources and use this information to formulate well-reasoned responses to major ideas, concerns, and debates in the study of US history;
3. describe the role of major ethnic and social groups in such events and the contexts in which the events have occurred, with attention to the multiple heritages of US culture;
4. identify and appreciate ethical issues related to US history and its study and interpretation, including the treatment of the diversity of American peoples and cultures;
5. situate significant historical events, across “a minimum time space of approximately 100 years,” in their cultural and sociopolitical contexts within and beyond the US; and
6. articulate the relevance of events in US history to their own lives.

**Links between Educational Goals and Outcomes for Lower Division Social Sciences: US History**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division social sciences: US history. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Social Sciences: US History</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>2. Intellectual Attainments</td>
<td>1</td>
</tr>
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<td>3. Appreciation of Diversity</td>
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<tr>
<td>4. Ethical Engagement</td>
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</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>5, 6</td>
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**Course Expectations for Lower Division Social Sciences: US and California Government (D3) (3 units)**

To be certified by the Baccalaureate Requirements Committee as meeting the lower-division social sciences: US and California Government (D3) general education requirement,

1. The course must be lower division and open to all students. Courses that are numbered between 100 and 199 may not have prerequisites other than passage of EPT, ESLPT,
ELM, or an exemption for one or more of these tests. Courses that are numbered between 200 and 299 may have a single prerequisite, but departments and programs must provide an adequate justification for that prerequisite. Typically, students should be eligible to enroll in lower division general education courses in their first year.

2. As mandated by CSU Executive Order 405, the US and California Government component of the American Institutions requirement may be met either by examination (AP, CLEP, or San Francisco State University competency exam) or by taking a course meeting the following content requirements and their corresponding student learning outcomes. All courses approved for the US and California Government requirement must cover:

- the political philosophies of the framers of the Constitution and the nature and operation of United States political institutions and processes under that Constitution as amended and interpreted;
- basic concepts in political theory such as power and influence; political structure and process; government, its legitimacy and authority; and their application to understanding the US system, particularly the roles of law and the Constitution and the relationship between the two;
- the rights and obligations of citizens established under the Constitution, in the context of basic American values and ideals, including freedom and self-reliance; equality; social fairness; democracy, including issues of participation and minority rights;
- the constitution of the State of California within the framework of evolution of Federal-State relations and the nature and processes of State and local government under that Constitution; and
- contemporary relationships of State and local government, the resolution of conflicts and the establishment of cooperative processes under the constitutions of both the State and Nation, and the political processes involved.

3. The course syllabus must list the university-approved student learning outcomes for US and CA Government (D3) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Lower Division Social Sciences: US and CA Government (D3) (3 units)**

After completion of a lower division general education course in US and CA Government, students will be able to:

1. understand US and California political institutions and practices, including governmental structures and federal and state constitutions, and their history and development;

2. evaluate information from a variety of sources and use this information to formulate well-reasoned responses to major issues of governance as they affect the US and California;

3. appreciate the contributions of diverse peoples and cultures to our political processes and a constitutional system which protects minority rights; be able to engage in informed,
civil discourse with persons different from themselves in intellectual and cultural outlook;

4. identify the rights and responsibilities of citizenship, including the importance of participation in the political process, and other ethical issues that arise in relation to US and California political institutions and practices;

5. situate US and California political institutions and practices in the local and/or global cultural, historical, and sociopolitical contexts in which they occur within and beyond the US; and

6. articulate the relevance of US and California political institutions and practices to their own lives.

**Links between Educational Goals and Outcomes for Lower Division Social Sciences: US and CA Government**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lower division social sciences: US and CA government. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lower Division Social Sciences: US and CA Government</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
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<tr>
<td>5. Integration and Application of Knowledge</td>
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Appendix C
Lifelong Learning and Self-Development (LLD) (Area E) (3 units)

The GRTF is recommending that Lifelong Learning and Self Development (LLD) (Area E in E.O. 1033) be fulfilled as an overlay. Overlay courses are courses that meet more than one requirement and thus they may be completed without taking additional units, if they are taken to fulfill other requirements. Students may complete more than one overlay with a single course, if that course has been approved as meeting more than one overlay. Any course (one in general education, a major, a minor, a certificate, complementary studies, or an elective) that is designated as a LLD course meets that requirement.

Course Expectations for Lifelong Learning and Self-Development (3 units; may be an overlay)

To be certified by the Baccalaureate Requirements Committee as meeting the lifelong learning and self-development (Area E) general education requirement,

1. The course may be a lower or upper division course, with or without prerequisites, a transfer course or a course taken in residence, and it may be anywhere in the curriculum (e.g., GE, major, minor, certificate, electives, etc.). Each student earning a baccalaureate degree from San Francisco State University is required to complete at least one Lifelong Learning and Self-Development class.

2. Course syllabi must include the university approved student learning outcomes for Lifelong Learning and Self-Development (LLD) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

3. Assignments that correspond to the assignment expectations stated below.

4. Readings for the course should encourage students to reflect on themselves as integrated physiological, social, psychological, and aesthetic beings.

5. At least one assignment will have students identify and actively engage in a change that is conducive to individual well-being or self-development.

6. At least one of the assignments shall involve developing a plan for acquiring information, including library resources; evaluating information, including distinguishing scholarly/non-scholarly information and primary/secondary sources; and properly using and citing the information in assignments.

Student Learning Outcomes for Lifelong Learning and Self-Development (3 units; may be an overlay)

After completion of a course designated as fulfilling the Lifelong Learning and Self-Development requirement, students will be able to:

1. read and evaluate resources about self development as an integrated physiological, social, and psychological being as they relate to life-long learning and transformation;
2. utilize a plan for acquiring information, including library resources; evaluating information, including distinguishing scholarly/non-scholarly information and primary/secondary sources; and properly using and citing the information in assignments;

3. articulate how they are an integrated physiological, social, and psychological being; and

4. identify actions they can take which are conducive to individual well-being and self-development.

**Links between Educational Goals and Outcomes for Lifelong Learning and Self-Development**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for lifelong learning and self-development. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Lifelong Learning and Self-Development</th>
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<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>1, 2, 3</td>
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<tr>
<td>2. Intellectual Attainments</td>
<td>1, 3</td>
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<tr>
<td>5. Integration and Application of Knowledge</td>
<td>3, 4</td>
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Appendix D: Course Expectations, Student Learning Outcomes, and Links to Goals for American Ethnic and Racial Minorities (AERM) (3 units)

Overlay courses are expected to engage students with the core values of San Francisco State University. Courses approved to satisfy overlay requirements are expected to meet the spirit of these requirements. The theme of the overlay should be infused into the course but is not required to be the primary theme or topic of the course. Although some assignments must address the overlay, it is not required that all assignments do so.

Students earning baccalaureate degrees from San Francisco State University must complete a three-unit course that is designated as an American Ethnic and Racial Minorities (AERM) course. Any course (one in general education, a major, a minor, a certificate, complementary studies, or an elective) that is designated an AERM course may meet this requirement. Students may use the same course to fulfill more than one requirement, if the course is designated as meeting more than one requirement, but the units will be counted only once.

Recognizing that "race" is a historically and socially constructed category, American ethnic and racial minority populations are defined as those that are:

- excluded from the dominant majority community or culture;
- excluded from sustained influence on, access to, and participation in structures and institutions in the United States and the privilege of power deriving from such exclusions;
- identify with or see themselves as members of a distinct ethnic or racial minority group; and
- racialized as members of that (or another racialized) group and as such, have been systematically oppressed by the dominant society's institutions and ideologies.

Course Expectations for American Ethnic and Racial Minorities (3 units; may be an overlay)

To be certified by the Baccalaureate Requirements Committee as meeting the American Ethnic and Racial Minorities (AERM) university requirement,

1. The course may be a lower or upper division course, with or without prerequisites, a transfer course or a course taken in residence, and it may be anywhere in the curriculum (e.g., GE, major, minor, certificate, electives, etc.). Each student earning a baccalaureate degree from San Francisco State University is required to complete at least one American Ethnic and Racial Minorities class

2. Course syllabi must include the university approved student learning outcomes for American Ethnic and Racial Minorities (AERM) and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

3. Assignments that correspond to the assignment expectations stated below.

4. Courses approved for the American Ethnic and Racial Minorities Requirement should:
• present views of one or more groups of American Ethnic and Racial Minorities both from the perspective of the group and as an integral part of American society;
• encourage the study of values, attitudes, behaviors and/or creative endeavors that acknowledge and respect the dignity of all groups; and
• present a thorough analysis of the historical experiences, social stratification processes, political activism, basic cultural patterns, aesthetic experiences and/or ideologies, and include one or more of the oppressed groups of color: African Americans, American Indians, Asian Americans, Pacific Islander Americans, US Latinas/Latinos, South West Asian/North African Americans, and people of mixed racialized heritages.

Student Learning Outcomes for American Ethnic and Racial Minorities (3 units; may be an overlay)

After successfully completing a course designated as fulfilling the American Ethnic and Racial Minorities requirement, students will be capable of applying scholarship in the study of American Ethnic and Racial Minorities and will be able to do at least two of the following:

1. identify the historical, political, and/or cultural and aesthetic experiences and actions of one or more US ethnic/racial minority groups;
2. identify the value systems and/or styles of creative expression of one or more ethnic/racial minority groups of the United States;
3. develop social and cultural participation skills, decision-making abilities, and political awareness in order to be citizens in an ethnically and racially diverse nation; and
4. develop the understandings and behavioral competencies necessary for effective interpersonal and inter-ethnic group interactions such as the following:
   • recognizing the dynamics of racial hierarchies and power relations,
   • recognizing the dynamics of interpersonal interactions,
   • recognizing the problems of ethnic and racial minority stereotypes, and
   • recognizing the diversity of attitudes and values which are projected in verbal and nonverbal behavior.

Links between Educational Goals and Outcomes for American Ethnic and Racial Minorities

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for American Ethnic and Racial Minorities. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.
<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for American Ethnic and Racial Minorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Appreciation of Diversity</td>
<td>1, 2, 3, and/or 4</td>
</tr>
</tbody>
</table>
Appendix E:

Course Expectations, Student Learning Outcomes, and Links to Goals for Environmental Sustainability (3 units)

Overlay courses are expected to engage students with the core values of San Francisco State University. Courses approved to satisfy overlay requirements are expected to meet the spirit of these requirements. The theme of the overlay should be infused into the course but is not required to be the primary theme or topic of the course. Although some assignments must address the overlay, it is not required that all assignments do so.

Students earning baccalaureate degrees from San Francisco State University must complete a three-unit course that is designated as an Environmental Sustainability (ES) course. Any course (one in general education, a major, a minor, a certificate, complementary studies, or an elective) that is designated an ES course may meet this requirement. Students may use the same course to fulfill more than one requirement, if the course is designated as meeting more than one requirement, but the units will be counted only once.

Course Expectations for Environmental Sustainability (3 units; may be an overlay)

To be certified by the Baccalaureate Requirements Committee as meeting the Environmental Sustainability (ES) university requirement,

1. The course may be a lower or upper division course, with or without prerequisites, a transfer course or a course taken in residence, and it may be anywhere in the curriculum (e.g., GE, major, minor, certificate, electives, etc.). Each student earning a baccalaureate degree from San Francisco State University is required to complete at least one Environmental Sustainability class.

2. The course must examine some aspect of environmental sustainability. The perspective can be from social sciences, natural sciences, arts, humanities, business, engineering, etc.

3. The course syllabus must list the university-approved student learning outcomes for environmental sustainability and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

Student Learning Outcomes for Environmental Sustainability (3 units; may be an overlay)

After completion of a course designated as fulfilling the environmental sustainability requirement, students will be able to do at least two of the following:

1. demonstrate how their personal activities impact the environment, and as a result affect the health and well-being of themselves and society.

2. analyze how the well-being of human society is dependent on ecosystems and the materials and services they provide to humanity.

3. explain the interconnectivity of economic prosperity, social equity and environmental quality.
4. identify the most serious environmental problems globally and locally and explain their underlying causes and possible consequences.

5. students will be able to create models, products, designs or creative representations that highlight an understanding of the connections between people, processes and the environment.

Links between Educational Goals and Outcomes for Environmental Sustainability

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for Environmental Sustainability. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Environmental Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Ethical Engagement</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>5. Integration of knowledge</td>
<td>3, 5</td>
</tr>
</tbody>
</table>
Appendix F:
Course Expectations, Student Learning Outcomes, and Links to Goals for Global Perspectives (GP) (3 units)

Overlay courses are expected to engage students with the core values of San Francisco State University. Courses approved to satisfy overlay requirements are expected to meet the spirit of these requirements. The theme of the overlay should be infused into the course but is not required to be the primary theme or topic of the course. Although some assignments must address the overlay, it is not required that all assignments do so.

Students earning baccalaureate degrees from San Francisco State University must complete a three-unit course that is designated as a Global Perspectives (GP) course. Any course (one in general education, a major, a minor, a certificate, complementary studies, or an elective) that is designated a GP course may meet this requirement. Students may use the same course to fulfill more than one requirement, if the course is designated as meeting more than one requirement, but the units will be counted only once.

Course Expectations for Global Perspectives (3 units; may be an overlay)

To be certified by the Baccalaureate Requirements Committee as meeting the American Ethnic and Racial Minorities (AERM) university requirement,

1. The course may be a lower or upper division course, with or without prerequisites, a transfer course or a course taken in residence, and it may be anywhere in the curriculum (e.g., GE, major, minor, certificate, electives, etc.). Each student earning a baccalaureate degree from San Francisco State University is required to complete at least one global perspectives class.
2. The course must examine topics that are global in scope (i.e., that involve different parts of the world), and must compare and contrast human experiences and perspectives, whether in the present or the past.
3. Any course taken in an approved CSU study-abroad program will automatically fulfill this requirement.
4. The course syllabus must list the university-approved student learning outcomes for global perspectives and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

Student Learning Outcomes for Global Perspectives (3 units; may be an overlay)

After completion of a course designated as fulfilling the Global Perspective requirement, students will be able to at least two of the following:

1. recognize that one's view of the world is not universally shared and that others may have profoundly different perceptions;
2. analyze similarities and differences among human experiences and perspectives in different parts of the world and draw conclusions about the significance and consequences of these similarities and differences;
3. understand how the world's systems are interdependent and how local economic and social patterns have global impact beyond their effects on individual lives; and
4. describe factors that contribute to or threaten the well-being of individuals and/or communities in several areas of the world, or factors that did so in the past.

**Links between Educational Goals and Outcomes for Global Perspectives**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for global perspectives. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Global Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Appreciation of Diversity</td>
<td>1, 2</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>4</td>
</tr>
<tr>
<td>5. Integration and Application</td>
<td>3, 4</td>
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</tbody>
</table>
Appendix G: 
Course Expectations, Student Learning Outcomes, and Links to Goals for Social Justice (SJ) (3 units)

Overlay courses are expected to engage students with the core values of San Francisco State University. Courses approved to satisfy overlay requirements are expected to meet the spirit of these requirements. The theme of the overlay should be infused into the course but is not required to be the primary theme or topic of the course. Although some assignments must address the overlay, it is not required that all assignments do so.

Students earning baccalaureate degrees from San Francisco State University must complete a three-unit course that is designated as a Social Justice (SJ) course. Any course (one in general education, a major, a minor, a certificate, complementary studies, or an elective) that is designated an SJ course may meet this requirement. Students may use the same course to fulfill more than one requirement, if the course is designated as meeting more than one requirement, but the units will be counted only once.

Course Expectations for Social Justice (3 units; may be an overlay)

To be certified by the Baccalaureate Requirements Committee as meeting the Social Justice (SJ) university requirement,

1. The course may be a lower or upper division course, with or without prerequisites, a transfer course or a course taken in residence, and it may be anywhere in the curriculum (e.g., GE, major, minor, certificate, electives, etc.). Each student earning a baccalaureate degree from San Francisco State University is required to complete at least one social justice class.

2. The course must address social constructions of identity, hierarchy, power, and privilege; community resistance and empowerment; and social justice. The social constructions may be related to variations among humans, including such factors as abilities, ages, cultures, genders, geographic locations, histories, immigration statuses, languages, national and ethnic identities, racializations, religions, sexualities, socio-economic classes.

3. The course syllabus must list the university-approved student learning outcomes for social justice and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

Student Learning Outcomes for Social Justice (3 units; may be an overlay)

After completion of a course designated as fulfilling the Social Justice requirement, students will be able to:

1. analyze, articulate, and apply principles of social justice in addressing social constructions of identity, hierarchy, power, and privilege; and

2. identify ways in which they can contribute to social justice within local communities, nations, or the world.
Links between Educational Goals and Outcomes for Social Justice

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for social justice. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Social Justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Ethical Engagement</td>
<td>1, 2</td>
</tr>
</tbody>
</table>
Appendix H:
Course Expectations, Student Learning Outcomes, and Links to Goals for Upper-Division General Education

All students must complete a total of nine units with one course in each of the following CSU-mandated groupings of domains of knowledge and inquiry: (1) Upper Division Physical and/or Life Sciences (Area UD – B), (2) Upper Division Arts and/or Humanities (Area UD – C), and (3) Upper Division Social Sciences (Area UD – D). These subject designations come from Executive Order 1033, “CSU General Education Breadth Requirements,” which governs general education requirements in the California State University system. We interpret the subject area distinctions of EO 1033 as domains of knowledge with distinct methods of inquiry rather than categories that can be defined by college, department, or program designations. Courses that meet the student learning outcomes identified for an area will be approved for that area, regardless of the disciplinary designation of the unit originating the proposal.

There are three options for students to complete the Upper Division General Education Requirement: Integrated Studies, Study Abroad, and Topical Perspectives. Details about each of these options appear in the section below titled “Three Options for Completing Upper Division General Education,” but immediately following is a list of course expectations and student learning outcomes, which pertain to all three options.

I. Upper Division Physical and/or Life Science (Area UD – B)

To be certified by the Baccalaureate Requirements Committee as meeting the upper-division physical and/or life science (UD – B) general education requirement,

1) The course must be open to all students, regardless of major, who meet the prerequisites. Students shall not be held to prerequisites that are not specified in the current online University Bulletin. Prerequisites must not unduly restrict access and are restricted to upper division standing or one of the following:
   - lower division general education course(s);
   - other upper division general education courses when the courses are sequenced;
   - individual course placement tests;
   - generic course prerequisites (e.g., a psychology course, a biology course, a history course and so forth); or
   - equivalents to the above;

2) At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing advanced search strategies to examine a wide variety of potential sources, including library resources; (b) articulating and applying advanced criteria in evaluating information and sources, including distinguishing scholarly/non-scholarly information and primary/secondary sources; (c) properly using and citing the information in assignments; and (d) formulating arguments and/or theories supported by information from multiple sources;

3) The course syllabus must include references to assignments that are described above as part of the course expectations;
4) The course syllabus must list the university-approved student learning outcomes for upper division physical and/or life science and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes;

5) Students will be given an opportunity to explore how scientific knowledge can be applied to their own lives and to ways in which they could contribute purposefully to the well-being of their local communities, their nations, or the people of the world; to social justice; and/or to the sustainability of the natural environment; and

6) Students in the course will develop knowledge of the physical universe and/or its life forms.

**Student Learning Outcomes for Upper Division Physical and/or Life Science (3 units)**

After completion of an upper division general education course in physical and/or life sciences, students will be able to:

1) apply scientific methods of inquiry and analysis (such as hypothesis testing, systematic and reproducible observations, and the analysis of measurable data) to the physical universe, including either living or nonliving systems;

2) articulate how scientific theories and practices come to be accepted, contested, changed, or abandoned by the scientific community;

3) evaluate the quality of scientific information and claims on the basis of their source and the methods used to generate the information or claims;

4) construct coherent and sound arguments with support from multiple sources, including library resources and proper citations, to support or contest a scientific theory; and

5) analyze the connection of scientific research, discoveries and applications to personal, social or ethical issues in the modern world.
Links between Educational Goals and Outcomes for Upper Division Physical and/or
Life Science

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for upper division physical and/or life science. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Upper Division Physical and/or Life Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>3, 4</td>
</tr>
<tr>
<td>2. Intellectual Attainments</td>
<td>1, 2</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>5</td>
</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>6</td>
</tr>
</tbody>
</table>

II. Upper Division Arts and/or Humanities (Area UD – C)

1. Course Expectations for Upper Division Arts and/or Humanities (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the upper-division arts and/or humanities (UD – C) general education requirement,

1. The course must be open to all students, regardless of major, who meet the prerequisites. Students shall not be held to prerequisites that are not specified in the current online University Bulletin. Prerequisites must not unduly restrict access and are restricted to upper division standing or one of the following:
   - lower division general education course(s);
   - other upper division general education courses when the courses are sequenced;
   - individual course placement tests;
   - generic course prerequisites (e.g., a psychology course, a biology course, a history course and so forth); or
   - equivalents to the above.

2. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing advanced search strategies to examine a wide variety potential sources, including library resources; (b) articulating and applying advanced criteria in evaluating information and sources, including distinguishing scholarly/non-scholarly information and primary/secondary sources; (c) properly using and citing the information in assignments; and (d) formulating arguments and/or theories supported by information from multiple sources.
3. The course syllabus must include references to assignments that are described above as part of the course expectations.

4. The course syllabus must list the university-approved student learning outcomes for upper division arts and humanities and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

2. **Student Learning Outcomes for Upper Division Arts and/or Humanities (3 units)**

After completion of an upper division general education course in arts and/or humanities, students will be able to:

1. apply artistic or humanistic methods of inquiry and analysis (including creation, interpretation, and evaluation) to study aesthetic experiences, expressive forms, belief systems, or communicative practices and relate them to the social and cultural contexts in which they are rooted;

2. articulate how theories and practices in the arts and/or humanities come to be accepted, contested, changed, or abandoned by the scholarly or artistic communities;

3. evaluate the quality of information, claims, expressions, and interpretations;

4. construct coherent and sound arguments with support from multiple sources, including library resources and proper citations, that communicate what students have discovered;

5. analyze social issues as well as ethical dilemmas and choices that arise out of artistic or humanistic research, discoveries, and applications; and

6. analyze multiple forms and variations of human diversity found in aesthetic experiences, expressive forms, belief systems, or communicative practices, and apply that knowledge to their own lives and to ways in which they could contribute purposefully to the well-being of their local communities, their nations, and the people of the world; to social justice; and/or to the sustainability of the natural environment.

3. **Links between Educational Goals and Outcomes for Upper Division Arts and/or Humanities**

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for upper division arts and/or humanities. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Upper Division Arts and/or Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>3, 4</td>
</tr>
<tr>
<td>2. Intellectual Attainments</td>
<td>1, 2</td>
</tr>
<tr>
<td>3. Appreciation of Diversity</td>
<td>6</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>5</td>
</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>6</td>
</tr>
</tbody>
</table>
III. Upper Division Social Sciences (Area UD – D)

1. Course Expectations for Upper Division Social Sciences (3 units)

To be certified by the Baccalaureate Requirements Committee as meeting the upper-division social sciences (UD – D) general education requirement,

1. The course must be open to all students, regardless of major, who meet the prerequisites. Students shall not be held to prerequisites that are not specified in the current online University Bulletin. Prerequisites must not unduly restrict access and are restricted to upper division standing or one of the following:
   - lower division general education course(s);
   - other upper division general education courses when the courses are sequenced;
   - individual course placement tests;
   - generic course prerequisites (e.g., a psychology course, a biology course, a history course and so forth); or
   - equivalents to the above.

2. At least one of the assignments shall involve (a) utilizing a plan for acquiring and recording information employing advanced search strategies to examine a wide variety of potential sources, including library resources; (b) articulating and applying advanced criteria in evaluating information and sources, including distinguishing scholarly/non-scholarly information and primary/secondary sources; (c) properly using and citing the information in assignments; and (d) formulating arguments and/or theories supported by information from multiple sources.

3. The course syllabus must include references to assignments that are described above as part of the course expectations.

4. The course syllabus must list the university-approved student learning outcomes for upper division social science and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

2. Student Learning Outcomes for Upper Division Social Sciences (3 units)

After completion of an upper division general education course in social sciences, students will be able to:

1. apply the methods of inquiry and analysis characteristic of one or more of the behavioral and social science disciplines to the study of human behavior, institutions, or socio-economic systems as related to the appropriate economic, ethnic, geographic, historical, political, social, or cultural contexts;

2. articulate how theories and practices in one or more of the behavioral and social science disciplines come to be accepted, contested, changed, or abandoned by the scholarly community;
3. evaluate the quality of behavioral and social scientific information and claims on the basis of their sources and the methods used to generate that information;

4. construct coherent and sound arguments with support from multiple sources, including library resources and proper citations, that communicate what students have discovered;

5. analyze economic, political, social, or cultural issues as well as ethical dilemmas and choices that arise out of behavioral or social scientific research, discoveries, and applications; and

6. analyze issues of equity and discrimination related to human behavior or to economic, political, social, or cultural institutions or systems, in the present or in the past, and, as appropriate, apply that knowledge to their own lives and to ways in which they could contribute purposefully to the well-being of their local communities, their nations, and the people of the world; to social justice; and/or to the sustainability of the natural environment.

3. Links between Educational Goals and Outcomes for Upper Division Social Sciences

The student learning outcomes were developed in relationship to the “Educational Goals for the Baccalaureate at San Francisco State University.” The chart below illustrates that relationship for upper division social sciences. The numbers correspond to the way the educational goals and student learning outcomes are numbered above.

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Student Learning Outcomes for Upper Division Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competencies for Lifelong Intellectual Endeavor</td>
<td>3, 4</td>
</tr>
<tr>
<td>2. Intellectual Attainments</td>
<td>1, 2</td>
</tr>
<tr>
<td>3. Appreciation of Diversity</td>
<td>6</td>
</tr>
<tr>
<td>4. Ethical Engagement</td>
<td>5</td>
</tr>
<tr>
<td>5. Integration and Application of Knowledge</td>
<td>6</td>
</tr>
</tbody>
</table>

IV. Three Options for Completing Upper Division General Education

All students must complete a total of nine units with one course in each of the following CSU-mandated groupings of domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences. There are three options for students to complete the Upper Division General Education Requirement: Topical Perspectives, Integrated Studies, and Study Abroad. Figure 1 provides a visual representation of these options.
Proposed Upper Division General Education Options

Option 1
Topical Perspectives
(9 units)

Choose one Topical Perspective and take one course from each of the three Domains of Knowledge and Inquiry.

Creativity, Innovation and Invention
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Enduring Ideas, Values and Achievements
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Environmental Interconnections
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Ethical Reasoning and Action
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Human Diversity
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Life in the San Francisco Bay Area and/or California
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Personal and Community Well Being
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Social Justice and Civic Knowledge/Engagement
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

World Perspectives
(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Option 2
Integrated Study
(9 units)

Three courses that have been devised by a faculty team into a coherent, integrative program of study.

The program as a whole must integrate the following groupings of Domains of Knowledge and Inquiry:

(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Option 3
Study Abroad
(9 units)

A minimum of three courses, with at least five units taken abroad, plus a one-unit integration course.

The program as a whole must integrate the following groupings of Domains of Knowledge and Inquiry:

(1) Physical and/or Life Sciences
(2) Arts and/or Humanities
(3) Social Sciences

Figure 1
V. Topical Perspectives Option (9 units minimum; must be taken in residence at San Francisco State University)

Students who complete the upper division general education requirement through the Topical Perspectives Option choose one of the following nine topics that best suits their intellectual interests and academic goals:

1. Creativity, Innovation, and Invention
2. Enduring Ideas, Values, and Achievements
3. Environmental Interconnections
4. Ethical Reasoning and Action
5. Human Diversity
6. Life in the San Francisco Bay Area and/or California
7. Personal and Community Well-Being
8. Social Justice and Civic Knowledge/Engagement
9. World Perspectives

The topical perspectives are rooted in the educational goals for baccalaureate degrees at San Francisco State University. Each topical perspective requires three courses related to that topic, with one course in each of the following groupings of domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences. Faculty teaching an upper division general education course from one of these domains (e.g. sciences, arts, humanities, or social sciences), are encouraged to draw connections to the others as appropriate. Each course will be designed to meet seven student learning outcomes, one for the specific topical perspective and six for the designated domain of knowledge and inquiry. A single course may be in more than one topical perspective, if it meets the course expectations and student learning outcomes for each topical perspective. A few examples of the kinds of subjects that might be examined in a particular topical perspective are given; the examples are meant to be illustrative, not exhaustive.

1. Creativity, Innovation, and Invention
   a. Topical Course Expectations

Students will explore significant acts of creativity, innovation, and/or invention along with the processes that lead to them and their consequences. Some courses may provide an opportunity for students to apply their knowledge through one or more creative media, modes of expression, or methods of discovery. Courses might address, but are not limited to, such subjects as principles and models that give rise to scientific and technological breakthroughs; the origins and nature of artistic or literary creativity; social/political experiments; creative resistance and transformation; historical, social, cultural, and economic forces that influence creativity and invention; creativity and invention during periods of censorship or in societies that discourage free thought and expression; and the impact on societies, cultural traditions, or environmental
factors of major innovations in various fields of human endeavor. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After successfully completing the Creativity, Innovation, and Invention topic courses, students will be able to:

- analyze significant acts of creativity, innovation, and/or invention in terms of the processes that contribute to their emergence and the impact they can have on society and cultural traditions; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

2. Enduring Ideas, Values, and Achievements
   a. Topical Course Expectations
Students will clarify and deepen their understanding of what unites human beings—despite cultural difference and geographical distance—from ancient to contemporary times. Courses might address, but are not limited to, such subjects as human beings’ sense of connection to spiritual or transcendent forces, the relationship between the natural world and humankind, kinship and community bonds, the games people play, the transformation of experience into art, stories taking the form of quests or tragedies, the nature and implications of the distinctively human capacity for language, notions of identity and agency, democratic values, the development and character of cities, and technological advancement. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

   b. Student Learning Outcomes
After successfully completing the Enduring Ideas, Values, and Achievements topic courses, students will be able to:

- discern and assess important, abiding aspects of human nature and the complex cultural legacy they have inherited from many sources, and they should be able to draw meaningful connections between the subjects explored and their own experiences, beliefs, values, and goals as individuals and members of communities; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

3. Environmental Interconnections
   a. Topical Course Expectations
Students will examine interconnections among humans and other aspects of the natural world. Courses might address, but are not limited to, such subjects as environmental influences on human experiences, abuse and restoration of the environment, bioethics, ecosystems, environmental stability and change, sustainable designs and processes in a global world,
environmental racism and justice, environmental laws and policies, green business practices, ecotourism, global consequences of environmental crises, artistic or literary representations of human connections to the rest of the natural world, and environmental ethics. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After successfully completing the Environmental Connections courses, students will be able to:

• describe interconnections among humans and other aspects of the natural world, as well as their responsibility to work toward the sustainability of the natural environment, and as a result, increase the health and well-being of human societies; and

• meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

4. Ethical Reasoning and Action

a. Topical Course Expectations
Students will examine values that inform distinctions between right and wrong. Courses will explore the deliberative processes of ethically-minded people in situations where these distinctions are debated, contested, or unclear, and will foster an appreciation of the necessity of making individual or collective ethical choices, as well as the burdens often entailed in living with the consequences of such choices. Courses might address, but are not limited to, such subjects as ethical theory, human rights in the contemporary world, similarities and/or differences in ethical stances across communities, ethical issues in literature and the arts, feminist perspectives on ethics and morality, wartime political decisions, ethics and social policy, environmental ethics, freedom and social responsibility, ethical issues in health care, and the ethics of scientific or scholarly research. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After completing the Ethical Reasoning and Action topic courses, students will be able to:

• discern and analyze ethical issues, evaluate decisions and actions that have ethical implications, and reflect seriously on the motives of their conduct in the personal and public arenas; and

• meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

5. Human Diversity

a. Topical Course Expectations
Students will focus on multiple forms and variations of human diversity, from the physiological to the cultural, and will situate these in relation to time and place. Courses should encourage a respectful appreciation of differences among individuals and groups of people. Courses might
address, but are not limited to, such subjects as variations in age, ability, ethnic and racial categorization, gender and sexual orientation, psychological makeup, religion, ideology, worldview and epistemological framework, custom and tradition, creative expression, socioeconomic status, and family and community organization. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After successfully completing the Human Diversity topic courses, students will be able to:

- contextualize multiple forms and variations of human diversity, within the United States and/or globally, and participate in informed, civil discourse with persons different from themselves, particularly in intellectual and cultural outlook; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

6. Life in the San Francisco Bay Area and/or California
a. Topical Course Expectations
Students will examine issues, natural phenomena, human achievements, lifestyles, etc., that contribute to defining the distinctive character of the San Francisco Bay Area and/or California. Courses might address, but are not limited to, such subjects as the physical environment and natural life, urban and other communities, neighborhoods, socio-cultural characteristics of different communities, immigration and globalism, cultural institutions, arts and literature, scientific and technological enterprise, regional history, government and politics, progressive or populist movements, and social activism. Since ours is a region inextricably linked—culturally, environmentally, and economically—to much of the world, many courses will connect local realities to national and/or global issues and phenomena. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After successfully completing the Life in the San Francisco Bay Area and/or California topic courses, students will be able to:

- identify and analyze aspects of life in the San Francisco Bay Area and/or California that contribute to the region’s distinctive character, appreciate the complex set of forces that have shaped opportunities for and challenges to the region’s inhabitants, and recognize how they can seize on opportunities to improve the quality of life in the region; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

7. Personal and Community Well-Being
a. Topical Course Expectations
Students will acquire knowledge and skills needed to promote personal and community well-being for both current and future generations. Well-being includes emotional, psychological, intellectual, creative, spiritual, social, economic, physical, occupational, and environmental components. Courses might address, but are not limited to, such subjects as environmental sustainability, equitable interactions, philosophical and religious conceptions of the good life, the relationship between or interdependence of mind and body, nutrition and health, artistic and literary contributions to personal and societal well-being, environments that are fit habitations for human beings, community revitalization, and intellectual and emotional development across the life span. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes

After successfully completing the Personal and Community Well-Being courses, students will be able to:

- make informed choices that enhance the quality of life and health of themselves, others, and their communities; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

8. Social Justice and Civic Knowledge/Engagement

a. Topical Course Expectations

Students will explore their responsibility to work toward social justice and equity by contributing purposefully to the well-being of their local communities, their nations, and the people of the world. Courses might address, but are not limited to, such subjects as social power and privilege, characteristics and dynamics of systemic oppression, economic exploitation within societies and beyond their borders, the personal and social consequences of phenomena like racism or sexism, scientific and pseudoscientific accounts of racial or gender differences, art or literature that represents or resists social injustice, liberation movements and political strategies aimed at eradicating injustice, freedom of the press and civic knowledge/engagement, and community activism and advocacy. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes

After successfully completing the Social Justice and Civic Knowledge/Engagement courses, students will be able to:

- analyze the nature and dynamics of power and privilege, and articulate strategies for combating injustice and realizing positive social change; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.
9. World Perspectives

a. Topical Course Expectations
Students will examine transnational issues and themes or those that are global in scope, and compare natural phenomena, behavior, social and political institutions and processes, or cultural traditions, in the present or the past, involving at least two nations, peoples, or world regions. Courses might address, but are not limited to, such subjects as global climate change, epidemics and pandemics, the worldwide impact of changes in information technology, international trade, comparative historical or political study of revolutions, international conflicts and resolutions, transnational exploitation and resistance, colonialism/post-colonialism, diasporas, immigrants and refugees, world religions, modern art and/or literature of the Americas, and comparative aesthetic styles and forms. (Courses must also meet the course expectations for upper division general education courses indicated earlier.)

b. Student Learning Outcomes
After successfully completing the World Perspectives topic courses, students will be able to:

- analyze transnational or global issues and themes; compare a range of phenomena involving at least two nations, peoples, or world regions; and develop an understanding of the interrelatedness of events, institutions, traditions, etc., in many parts of the world across time; and
- meet the student learning outcomes for upper division general education courses in the three designated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

VI. Integrated Studies Option

(9 units minimum; must be taken in residence at San Francisco State University)

Integrative Course Expectations

Students must complete three courses that have been devised by a faculty team into a coherent, integrative program of study; one course in each of the following groupings of domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences. In order to receive credit for the Upper Division General Education Requirement through the Integrated Studies Option, students must complete a minimum of 9 units on the same theme. (Courses must also meet the course expectations for upper division general education courses indicated earlier. Though the courses must be open to students from any major, the courses can be restricted to cohorts of students taking a particular set of integrated courses.)

Student Learning Outcomes
After successfully completing the integrated studies upper division general education program, students will be able to:
• make connections among different types of knowledge and modes of inquiry across academic disciplines and among domains of knowledge and inquiry; and
• meet the student learning outcomes for upper division general education courses in the following domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

AU 401: Integrated Studies: Physical and/or Life Sciences (3-4 units; see note below)
Description: Physical and/or life science investigation of a selected topic that is integrated with study of an allied subject in the arts and/or humanities and the social sciences.

AU 402: Integrated Studies: Arts and/or Humanities (3-4 units; see note below)
Description: Artistic and/or humanistic investigation of a selected topic that is integrated with study of an allied subject in the physical and/or life sciences and the social sciences.

AU 403: Integrated Studies: Social Sciences (3-4 units; see note below)
Description: Social scientific investigation of a selected topic that is integrated with study of an allied subject in the physical and/or life sciences and the arts and/or humanities.

Note on the units requirement for AU 401, 402, and 402
The units of integrated studies may be more closely integrated or more interdisciplinary than is suggested by the three separate courses listed above, but the course of study should adhere to the spirit of providing the equivalent of at least three units in each of the following groupings of domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences. The titles listed here are generic ones for thematically linked courses. The actual courses would have specific titles that correspond to the theme. Faculty teams would be responsible for developing courses that meet the student learning outcomes. Ordinarily, students should be able to complete the integrated studies option in three or fewer semesters. Faculty proposing integrated studies options must provide contingency plans for how students can complete the upper division general education requirement, if some unforeseen circumstance makes it impossible for them to complete an integrated studies program they have started. In the initial certification phase, the Initial Certification Committee will evaluate proposals for a set of integrated courses. After the initial phase, the Upper Division Certification Committee will conduct this evaluation (the process for review is described in the section titled, “Process for Approving Courses to Fulfill University-Wide Requirements”).
VII. Study Abroad Option

(9 units minimum; must be taken in residence at either a CSU-approved Study Abroad institution or at San Francisco State University)

Study Abroad Course Expectations

Students must complete a minimum of three courses, which total at least nine semester units, with a minimum of five units taken in another nation in a CSU-approved Study Abroad program. Courses used to meet the upper division general education requirements through Study Abroad must be approved by a faculty advisor assigned by the Office of International Programs before a student leaves San Francisco State University. The three courses must be selected in the three CSU-mandated domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences. One to three of the courses may be completed abroad, with any remaining course(s) being completed at San Francisco State University, if necessary to equal at least nine units.

For the study abroad program for upper division general education, courses should focus on the host nation [e.g., a course on the geology, flora and fauna, environment, or scientific research of that nation (science), a course on the arts and/or literatures of that nation (arts and humanities), or a course on the histories, geographies, economies, or politics of that nation (social science)]. San Francisco State University courses, taught on campus or elsewhere, should focus on the other nation, region, or continent where students have studied, and address relationships between that area and the United States, and/or on descendants from that area who are now in the United States (e.g., a San Francisco State University course in Asian American Studies on the experience of Chinese Americans as a complement to courses taken about China.).

Student Learning Outcomes

After successfully completing the study abroad upper division general education program, students will be able to:

- make connections across academic disciplines and among domains of knowledge and inquiry as they relate to the host nation where the student studied, on relationships between that nation and the United States, and/or on descendants from that nation who are now in the United States; and

- meet the student learning outcomes for upper division general education courses in the following domains of knowledge and inquiry: (1) physical and/or life sciences, (2) arts and/or humanities, and (3) social sciences.

The following Course Expectations and Student Learning Outcomes will be used to approve and assess upper division courses fulfilling the American Institutions (AI) requirement. The Area D sub-committee of the Baccalaureate Requirements Committee (BRC) will use this document to approve courses for use in meeting the AI requirement. Courses meeting the AI requirement may be in upper division GE, the major, minor or an elective.
Course Expectations for Upper Division American Institutions

To be certified by the Baccalaureate Requirements Committee as an upper-division course that meets the Graduation Requirements in United States History, Constitution and American Ideals (as stipulated in CSU EO 1061):

1. The course must be upper division and open to all students. Courses in American Institutions should meet one or more of the following requirements: U.S. History, U.S. Constitution, and/or California Government.

2. As mandated by CSU Executive Order 1061, the U.S. History component of the American Institutions requirement may be met either by examination (AP, CLEP, or SF State competency exam) or by taking a course meeting the following content requirements and their corresponding student learning outcomes. All courses approved for the US History requirement must cover:
   - Significant events over a minimum time span of approximately one hundred years and occurring in the entire area now included in the United States of America, including the relationships of regions within the area and with external regions and powers as appropriate to the understanding of those events within the United States during the period under study.
   - The role of major ethnic and social groups in such events and the contexts in which the events have occurred.
   - The events presented within a framework that illustrates the continuity of the American experience and its derivation from other cultures, including consideration of three or more of the following: politics, economics, social movements, and geography.

3. As mandated by CSU Executive Order 1061, the U.S. and California Government component of the American Institutions requirement may be met either by examination (AP, CLEP, or SF State competency exam) or by taking a course meeting the following content requirements and their corresponding student learning outcomes. All courses approved for the U.S. and California Government requirement must cover:
   - The political philosophies of the framers of the Constitution and the nature and operation of United States political institutions and processes under that Constitution as amended and interpreted.
   - The rights and obligations of citizens in the political system established under the Constitution.
   - The Constitution of the state of California within the framework of evolution of federal-state relations and the nature and processes of state and local government under the Constitution.
   - Contemporary relationships of state and local government with the federal government, the resolution of conflicts and the establishment of cooperative processes under the constitutions of both the state and nation, and the political processes involved.
4. The course syllabus must list the university-approved student learning outcomes for the U.S. History or U.S. and California Government component and link them to activities and/or assignments that students complete to demonstrate they have met the outcomes.

**Student Learning Outcomes for Upper Division American Institutions**

Courses in American Institutions should meet one or more of the following requirements: U.S. History, U.S. Constitution, and California Government.

After completion of a course in upper division U.S. History to meet the American Institutions requirement, students will be able to:

- demonstrate an understanding of the significant events of an approximately one hundred year time-span, and occurring in the entire United States, including relationships of regions within that area as well as with external regions and powers as appropriate to the understanding of those events within the US during the period under study;
- explain the role of major ethnic and social groups in the significant events during the one hundred year time span, and the contexts in which the events occurred; and
- analyze the significant events within a framework that illustrates the continuity of the American experience and its derivation from other cultures, including consideration of three of more of the following: politics, economics, social movements, and geography.

1) After completion of a course in upper division U.S. Constitution and California Government to meet the American Institutions requirement, students will be able to:

- explain the political philosophies of the framers of the Constitution and the nature and operation of U.S. political institutions and processes under that Constitution as amended and interpreted;
- demonstrate an understanding of the rights and obligations of citizens in the political system established under the Constitution;
- interpret the Constitution of the state of California within the framework of the evolution of federal-state relations and the nature and processes of state and local government under that Constitution; and
- compare and contrast contemporary relationships of state and local government with the federal government, the resolution of conflicts and the establishment of cooperative processes under the constitutions of both the state and nation, and the political processes involved.

After completion of a course in upper division California Government to meet the American Institutions requirement, students will be able to:

- interpret the Constitution of the state of California within the framework of the evolution of federal-state relations and the nature and processes of state and local government under that Constitution; and
• compare and contrast contemporary relationships of state and local government with the federal government, the resolution of conflicts and the establishment of cooperative processes under the constitutions of both the state and nation, and the political processes involved.
Appendix I:
Complementary Studies Requirement

Because the Bachelor of Science and the Bachelor of Music degrees are meant to be more specialized degrees with higher units required in the major (~60), units beyond university-wide requirements (48 units) and those in the major should be reserved for elective units (~12) selected by the student.

On the other hand, because the Bachelor of Arts degree should represent a broad liberal arts education, with fewer units required in the major, and because students in these majors are likely to change careers and to have multiple interests, Bachelor of Arts students must complete at least twelve units of complementary studies outside of the primary prefix for the major. Completion of university-wide requirements (48 units), the major (~45), and the complementary studies requirement (12) should still leave BA students with at least as many or more units for electives (~15) as BS or BM students. Unlimited double counting among requirements will also yield additional elective units for BS, BM, and BA students.

Complementary studies units may come from languages other than English, minors, certificates, or a coherent group of courses approved by a major advisor as complementary to the major. With the approval of an advisor in the major, courses which fulfill complementary studies units may be lower or upper division units, resident or transfer units, or units taken in approved study abroad programs. BA programs may decide how many, if any, of the complementary units may be counted in the major, and they may designate specific courses to be taken for complementary studies credit or they may develop advising protocols to guide students through this process.

Students who complete two majors or a major and a minor automatically complete the complementary studies requirement.

The Complementary Studies Requirement contributes to many campus goals, including the CUSP Goal of increasing the number of graduates who are able to communicate in more than one language and Educational Goal #5: “Integration and Application of Knowledge: Graduates will know how to make connections among apparently disparate forms of knowledge and modes of inquiry across academic disciplines and between the principal domains of knowledge and their majors.”

Five Examples of Different Ways to Fulfill Complementary Studies

Below are five examples to illustrate various ways the Complementary Studies Requirement could be fulfilled (these hypothetical examples are not meant to pre-empt different choices that the programs listed below may make for themselves in fulfilling the Complementary Studies Requirement).

Complementary Studies Requirement in Bachelor of Arts in Anthropology

Students completing a Bachelors of Arts in Anthropology must complete at least twelve units in complementary studies with a prefix other than ANTH. These units may be in one or more languages other than English, a minor, a certificate, or a coherent group of courses approved by a major advisor as complementary to the major. All complementary studies units must be approved by an advisor in the major and all of the units must be separate from units counted in the major. With the approval of an advisor in the major, courses which fulfill complementary studies units
may be lower or upper division units, resident or transfer units, or units taken in approved study abroad programs.

**Complementary Studies Requirement in Bachelor of Arts in Chemistry**
Students completing a Bachelors of Arts in Chemistry must complete sixteen units in designated courses in math and physics. The completion of these sixteen units fulfills the complementary studies requirement in the BA in Chemistry and these units are counted in the major.

**Complementary Studies Requirement in Bachelor of Arts in Communication Studies**
Students completing a Bachelors of Arts in Communication Studies must complete at least twelve units in complementary studies with a prefix other than COMM. These units may be in one or more languages other than English, a minor, a certificate, or a coherent group of courses approved by a major advisor as complementary to the major. If approved by an advisor in the major, up to eight units of complementary studies may also be counted toward meeting major requirements and such courses may be lower or upper division, resident or transfer, or taken in approved study abroad programs.

**Complementary Studies Requirement in Bachelor of Arts in Environmental Studies**
The Bachelor of Arts in Environmental Studies requires sixteen units of course work with an ENVS prefix and another forty or more units from designated lists of courses from a variety of departments. All of the courses selected from the designated lists with prefixes other than ENVS fulfill both the major and the Complementary Studies Requirement.

**Complementary Studies Requirement in Bachelor of Arts in Journalism**
Students completing the Bachelor of Arts in Journalism must complete a minor that has been approved by the department. The minor fulfills the Complementary Studies Requirement.

Major programs submit their descriptions of complementary studies for their majors for review and approval by the Curriculum Review and Approval Committee. These descriptions will also be evaluated as part of the program review process as programs come up for review.
Appendix J: Sample Student Learning Outcomes for Technology in the Major

Every major is required to include somewhere in its curriculum appropriate instruction in the technologies most relevant to that major. Below are some examples of student learning outcomes related to technology in the major. These examples are only meant to be illustrations of what such outcomes might look like. Programs can embrace or revise these, or they can develop completely different ones.

Upon completing the major, students will

- access, critically evaluate, integrate/synthesize and disseminate digital information using current tools and technologies;
- engage in electronic collaboration;
- use and create structured electronic documents;
- make technology-enhanced presentations;
- use appropriate electronic tools for research and evaluation; and/or
- describe major legal, ethical, and security issues in information technology.

***Approved by the Academic Senate at its meeting on April 12, 2012 ***

- Endorsed by President Corrigan on November 17, 2011