



FOOTHILL COLLEGE

GENERAL EDUCATION Guidelines

**College Curriculum Committee
October 2009**

FOOTHILL COLLEGE GENERAL EDUCATION AND GRADUATION REQUIREMENTS

The requirements for the Associate in Art or Associate in Science Degree include completion of (1) a minimum of 90 units in prescribed courses; (2) a minimum of 24 units taken at Foothill College; (3) a grade-point average of 2.0 or better in all college courses including Foothill courses; (4) a major of at least 27 units in a curriculum approved by the Foothill Curriculum Committee; and (5) the seven general education requirements listed below. Students planning to transfer to four-year colleges or universities should also check with a counselor for the specific requirements of those institutions.

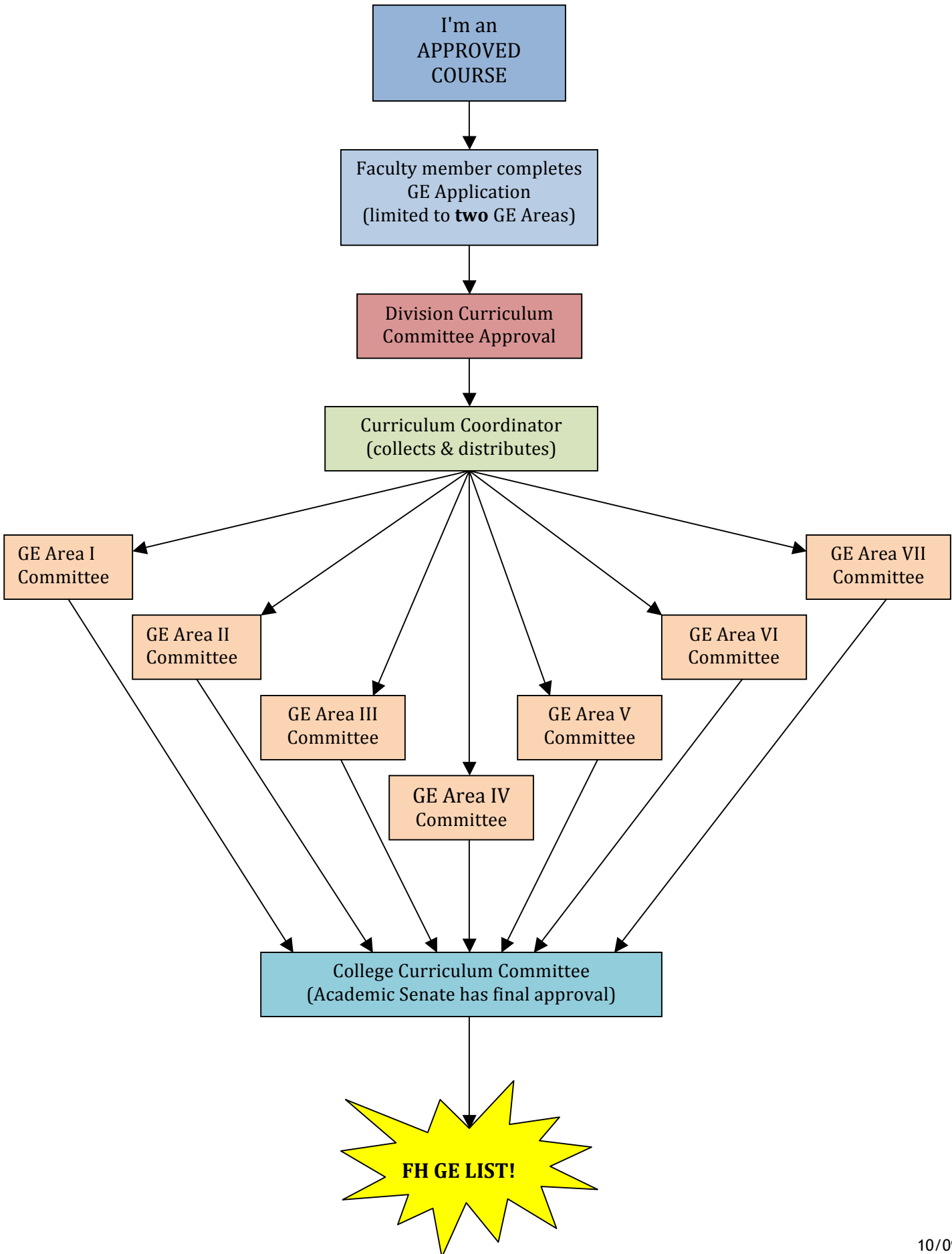
Students must successfully complete a minimum of 30-35 units from the courses listed with at least one course in Humanities, English, Natural Sciences (with laboratory), Social and Behavioral Sciences, Communication and Analytical Thinking, United States Cultures and Communities, and two courses in Lifelong Understanding from two different academic departments.

Courses may only be used in one area.

- I. Humanities
- II. English
- III. Natural Sciences (with a Laboratory)
- IV. Social & Behavioral Sciences
- V. Communication & Analytical Thinking
- VI. United States Cultures & Communities
- VII. Lifelong Understanding

Minimum proficiency: ENGL 1A or ESL 26 and MATH 105* completed with a letter grade of "C" or better.

*Intermediate Algebra or equivalent means MATH 105, or mathematics placement test score indicating eligibility for a mathematics course beyond the level of MATH 105, or completion of a higher-level course with a grade of "C" or better, or completion of a bachelor degree or higher from an accredited U.S. college or university.



GENERAL EDUCATION BREADTH REQUIREMENTS

At Foothill College, the primary objective of the general education requirements is to provide students with the depth and breadth of knowledge and understanding required to be independent, thinking persons who are able to interact successfully with others as educated and productive members of our diverse society. Design and implementation of the general education curriculum ensures that students have exposure to all major disciplines, understand relationships among the various disciplines, and appreciate and evaluate the collective knowledge and experiences that form our cultural and physical heritage. General education courses provide content that is broad in scope and at an introductory depth, and all require critical thinking.

A general education enables students to clarify and present their personal views as well as respect, evaluate, and be informed by the views of others. This academic program is designed to facilitate a process that enables students to reach their fullest potential as individuals, national and global citizens, and lifelong learners for the 21st century.

In order to be successful, students are expected to have achieved minimum proficiency in math (MATH 105) and English (ENGL 1A, 1AH or ESL 26) before enrolling in a GE course.

A completed pattern of general education courses provides students with opportunities to acquire, practice, apply, and become proficient in each of the core competencies listed below.

1. Communication (analytical reading, writing, speaking, and listening skills including evaluation, synthesis, and research).
2. Computation (application of mathematical concepts, and/or using principles of data collection and analysis to solve problems).
3. Creative, critical, and analytical thinking (reasoning, questioning, problem solving, and consideration of consequence).
4. Community and global consciousness and responsibility (consideration of one's role in society at the local, regional, national, and global level in the context of cultural constructs and historical and contemporary events and issues).
5. Information competency (ability to identify an information need, to find, evaluate and use information to meet that need in a legal and ethical way) and digital literacy (to teach and assess basic computer concepts and skills so that people can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families, and their communities).

AREA I - HUMANITIES

The humanities include courses in Arts and Letters that give students knowledge and understanding of significant works of the human intellect and imagination. These works cover all the varieties of human expression through time. Knowledge of the significance of the historical and cultural context in which the works are created and interpreted expands the students' awareness of the human condition, cultivating an appreciation of human values and achievements. Humanities courses should enable students to participate in social and cultural communities associated with artistic and literary endeavors, enriching their personal and professional lives.

A course meeting the Humanities requirement incorporates a multidisciplinary approach (drawing from *two or more* of the following - history, literature, philosophy, religion, language, and the arts) as it addresses and explores central questions about the meaning and experience of human life.

A course meeting the Humanities General Education Requirement must help students:

- H1. acquire knowledge and understanding of significant artistic, literary, or philosophical works and the historical and cultural context in which the works were created and interpreted;
- H2. deepen their knowledge of the human condition through systematic inquiry into consciousness, values, ideas, and ideals;
- H3. develop appreciation for what is significant about human life and its creations;
- H4. make reasoned judgments that reflect ethical and aesthetic human values;
- H5. develop the ability to respond to artistic and literary works both analytically and affectively through writing as well as through other forms of artistic expression.

In addition, courses *must* identify how they will help students achieve *at least two* of the following learning outcomes:

- H6. understanding of the ambiguities, vagaries, and value inherent in human language;
- H7. appreciation of nonverbal communication to be found in the visual and performing arts;
- H8. recognition of the variety of valid interpretations of artistic expression;
- H9. appreciation of our common humanity within the context of diverse cultures;
- H10. thinking critically, including the ability to find, recognize, analyze, evaluate, and communicate ideas, information, and opinions as they relate to the products of human intellect and imagination.

AREA II - ENGLISH

English composition courses address the literacy needs of the student in both academic and work-related tasks. The curricula concentrate on two core intellectual skills: comprehension and written expression at the college level. Comprehension includes the interaction of the reader with the text in order to extract meaning, discern patterns, and evaluate information. Written expression includes the student's understanding of audience and purpose, rhetorical and structural devices, supporting evidence, and effective and varied syntax. These courses also introduce that student to the aesthetics and power of the written word.

Courses meeting the English General Education Requirement *must* require students to:

- E1. Read and understand the written word, including comprehension, interpretation, analysis, evaluation, and synthesis of college-level expository, narrative, and argumentative non-fiction prose;
- E2. Write extended expository text-based compositions (minimum of 6,000 total word count) based on college-level readings, academic subject matter, and class discussion;
- E3. Think critically by recognizing and evaluating ideas, differentiating facts, inferences, opinions, and assumptions, and drawing and assessing conclusions;
- E4. Formulate an arguable thesis appropriate to audience and purpose and substantiate it through logical and systematic organization, supporting evidence, and clarity of expression;
- E5. Understand and implement the principles of written argumentation including induction and deduction, counter-arguments and concessions;
- E6. Use the sequential process of multiple drafts and revision in producing articulate and grammatically correct written expression;
- E7. Recognize and implement varied syntactical, rhetorical, and structural devices;
- E8. Research print and electronic media and attribute sources through textual citations and MLA documentation.

AREA III - NATURAL SCIENCES

Natural science courses deal with the physical universe, the testable principles that govern its operations, its life forms, and its natural, measurable phenomena. One primary purpose of these courses is to promote an awareness of the methods of scientific inquiry and the power of scientific inquiry to describe the natural world. Emphasis is on understanding and applying the scientific method, which promotes a sense of discovery, fosters critical analysis, and encourages an understanding of the relationships between science and other human activities. A General Education natural science course should exhibit the same methods and skills used by scientists when seeking an understanding of the uncertainty and complexity of the natural world.

A successful General Education natural science course **must** promote in students:

- N1. an understanding of the scientific method, including its attributes and limitations;
- N2. the ability to make judgments regarding the validity of scientific evidence;
- N3. an understanding of the relationship between hypothesis, experiment, fact, theory and law;
- N4. the ability to use inductive and deductive reasoning;
- N5. the practice of thinking critically, including evaluating ideas and contrasting opinions;
- N6. the ability to evaluate, use and communicate scientific data;
- N7. an introduction to current scientific theories within the field of study;
- N8. experience with laboratory activities using laboratory techniques consistent with those employed within the discipline;
- N9. experience applying recognized scientific methodology in laboratory activities.*

Additional criterion thought to enhance a natural science course include any of the following:

- N10. an appreciation of the contributions of science to modern life;
- N11. an appreciation of the contributions to science of diverse people and cultures;
- N12. an understanding of the interdependence of humans and their environment;
- N13. a recognition of how human behavior has altered the environment;
- N14. a sense of the history of science and the ideas and experiments that have led to our present understanding.

Be advised that the following criteria for a GE lab is consistent with a definition provided by the National Research Council, 2005:

“Laboratory experiences provide opportunities for students to interact directly with the material world (or with data drawn from the material world), using the tools, data collection techniques, models, and theories of science. This definition includes student interaction with astronomical databases, genome databases, databases of climatic events over long time periods, and other large data sets derived directly from the material

world. It does not include student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world. For example, if a physics teacher presented students with a constructed data set on the weight and required pulling force for boxes pulled across desks with different surfaces and asked them to analyze these data, the students' problem-solving activity would not constitute a laboratory experience in the committee's definition."

*To accomplish these goals a laboratory course **must** emphasize the methods of scientific inquiry by engaging students in:

NL15. Observation and collection of data through direct interaction with the material world;

NL16. Use of tools, data collection techniques, models and theories of science most prevalent in relevant research laboratories;

NL17. Data may be from large data sets derived directly from the material world, but may not rely exclusively on student manipulation or analysis of data created by a teacher to simulate direct interaction with the material world;

NL18. Analysis and interpretation of data;

NL19. Formulation and testing of hypotheses;

NL20. Communicating effectively through oral and/or written work;

NL21. A minimum of one collaborative activity;

NL22. A minimum of one laboratory unit or the equivalent of 33 hours of laboratory instruction per quarter.

* Additional criterion thought to enhance a natural science laboratory include any of the following:

NL23. Keep accurate and complete experimental records;

NL24. Perform quantitative and qualitative measurements;

NL25. Interpret experimental results and draw reasonable conclusions;

NL26. Analyze data statistically and assess the reliability of results;

NL27. Critically evaluate the design of an experiment;

NL28. Design experiments to test hypotheses;

NL29. Work effectively in small groups and teams.

AREA VI - SOCIAL & BEHAVIORAL SCIENCES

The social sciences embrace a large number of interrelated subjects that examine the relationship of human beings to society.

Courses meeting the General Education Requirement in Social and Behavior Sciences *must* include *all of the following* student learning outcomes:

- S1. explain the interactions of people as members of societies, cultures and social subgroups;
- S2. exercise critical thinking and analytical oral and/or written skills including consideration of events and ideas from multiple perspectives;
- S3. demonstrate knowledge and application of the scientific method in conducting research and in other methods of inquiry relative to the discipline.

In addition, courses meeting this requirement *must* include *at least three* of the following student learning outcomes:

- S4. demonstrate appreciation of and sensitivity towards diverse cultures -- their social, behavioral and organizational structure;
- S5. explain world development and global relationships;
- S6. recognize the rights, duties, responsibilities, and opportunities of community members;
- S7. analyze the relationship of business and economic activities to the functioning of society as a whole;
- S8. assess the distribution of power and influence;
- S9. analyze current events and global issues in the context of historic, ethical and social patterns;
- S10. comprehend and engage in social, economic and political issues at the local, national and global level;
- S11. display knowledge of human motivations, behaviors and relationships;
- S12. understand the evolutionary origins of humanity and how this relates to present day human interactions;
- S13. describe how individual interaction with the natural world and external societies shapes and influences human behavior;
- S14. Explain the association between psychological well-being, mental processes, emotions & societal functioning.

AREA V - COMMUNICATION & ANALYTICAL THINKING

Communication and analytical thinking curricula foster the ability to communicate knowledge, information, ideas, and feelings, and enhance the ability to evaluate, solve problems, and make decisions.

To accomplish this, a course meeting the Communication and Analytical Thinking General Education Requirement *must* offer students the opportunity to:

- C1. Apply the analytical skills learned in the course to other disciplines;
- C2. Develop competencies in communication or computation, and apply the appropriate technical, interpretive, and evaluative skills;
- C3. Read, interpret, and analyze statements and then be able to express them in symbolic form when appropriate;
- C4. Clearly and precisely express their ideas in a logical and organized manner using the discipline-appropriate language.

Expected outcomes of a successful course in this area *should* include some or all of the following:

- C5. Critically assess other people's ideas; and organize, edit, and evaluate their own ideas in order to articulate a position;
- C6. Identify goals when applying analytical skills;
- C7. Recognize limitations of applicable methodologies;
- C8. Use current technologies for discovering information and techniques for communication, analysis, evaluation, problem solving, decision-making, and presentation.

AREA VI - UNITED STATES CULTURES & COMMUNITIES

United States Cultures and Communities courses critically explore the current and historical interaction of different groups of Americans. These courses discourage discriminatory attitudes towards others by providing an empirical understanding of and appreciation for the marginalized groups that have been important in the development of United States history and culture, and the value of diverse cultural groups to American society.

Courses meeting the GE requirement in United States Cultures and Communities *must* include *all of the following* student learning outcomes:

- U1. demonstrate detailed knowledge of and sensitivity to at least one U.S. group categorized by race/ethnicity, gender, class, disability, sexual identity or religious belief who has suffered a history of systematic oppression and discrimination.
- U2. critically analyze the degree of (or dynamics of) the interaction between at least one marginalized culture or community and the dominant U.S. culture, or between two marginalized communities or cultures.
- U3. develop and articulate an awareness of one's own culturally-determined perspective and how it might be viewed from the perspective of others.

In addition, courses meeting the GE requirement for United States Cultures and Communities *must* include *at least three* of the following student learning outcomes:

- U4. critically examine the contributions of many groups to a particular aspect of United States culture.
- U5. evaluate and analyze the interaction of at least one marginalized culture with the dominant U.S. culture.
- U6. evaluate and analyze the interaction between at least two marginalized cultures or communities within the framework of United States society.
- U7. explain culture as a concept and how it can unite or divide people into various groups.
- U8. apply information about groups presented in the class to contemporary social and cultural relations.
- U9. analyze and interpret how culture shapes human development and behavior.

AREA VII - LIFELONG LEARNING

Courses in this area provide students with the skills needed to continue learning after they leave college. Courses focus on the study of humans as integrated intellectual, physiological, social and psychological beings in relation to society and the environment. Full understanding and synthesis of a subject area usually occurs when the skills mastered in a course of study are applied to the context of another discipline. Students are given an opportunity to experience this concept in courses that provide opportunities that bridge subject areas so that students learn to function as independent and effective learners.

Physical activity courses are given inclusion to this area in recognition of the reality that you have to be healthy and live a long life in order to take advantage of lifelong learning. Foothill College deems that: Physical activity courses are acceptable, if they entail movement by the student and are overseen by a faculty member or coach. These courses can be taken for up to 2 units.

A course meeting the Lifelong Learning General Education Requirement must help students:

- L1. Acquire and demonstrate knowledge, skills, and attitudes that support the application of information across two or more disciplines of study;
- L2. Develop practical tools that can be integrated into problem solving and decision making with current day-to-day issues and which can be adapted to future situations;
- L3. Identify current issues and concerns that influence health, communication or learning;
- L4. Comprehend and apply health and well-being issues to the individual and to society;
- L5. Find, evaluate, use and communicate information in all of its various formats and understand the ethical and legal implications of the use of that information.

In addition, a course meeting this requirement *must* include *at least one* of the following student learning outcomes:

- L6. Define career and life planning strategies and resources including goal setting and time management, learning styles and self-awareness, building a positive work ethic and leadership qualities;
- L7. Analyze beliefs, attitudes, biases, stereotypes, and behaviors in individuals and communities regarding temporary needs, problems and concerns facing society;
- L8. Understand the importance of physical fitness and its impact on an individual's physical and mental health;
- L9. Use technology to analyze problems and create solutions.