

SCHOOL FOR SOCIAL JUSTICE AND ECOLOGY

COURSE OFFERINGS

The following courses will be considered as fulfilling the program requirements for SSJE. Every student must take six courses per year. Students enrolled in small schools fulfill the small school requirements and any other courses students have room for in their schedule are taken from individual departments. Refer to page 49 for department options.

	CREDITS EARNED	UC/CSU	UC/CSU SUBJECT AREA REQUIREMENT
9TH GRADE			
ENGLISH 1A/1B	10	●	“b” - English
SOCIOLOGY	10		
GEOMETRY	10	●	“c” - Math
ADVANCED BIOLOGY	10	●	“d” - Science
10TH GRADE			
WORLD LITERATURE	10	●	“b” - English
WORLD HISTORY	10	●	“a” - History
ALGEBRA 2	10	●	“c” - Math
CHEMISTRY	10	●	“d” - Science
11TH GRADE			
AMERICAN LITERATURE	10	●	“b” - English
U.S. HISTORY	10	●	“a” - History
MATH ANALYSIS	10	●	“c” - Math
AP ENVIRONMENTAL SCIENCE	10	●	“d” - Science
12TH GRADE			
COMPOSITION/GENRE IN LITERATURE	10	●	“b” - English
GOVERNMENT/ECONOMICS	10	●	“a” - History
AP CALCULUS OR AP STATISTICS	10	●	“c” - Math
AP PHYSICS, PHYSICS OR HONORS ANATOMY	10	●	“d” - Science
ECO-LITERACY/BEST HISTORY	10	●	“g” - Elective

School for Social Justice and Ecology (SSJE)

SSJE Curriculum takes student learning beyond the boundaries of the classroom. SSJE students participate in learning expeditions that are woven into the science, humanities, and math curricula. Projects include: habitat restoration in the S.F. Bay, Literacy Partnership with Washington Elementary School, developing an organic garden at Berkeley High School, taking a Toxic Tour of Richmond, and finding ways to reduce the amount of waste at Berkeley High School. Service Learning for juniors and seniors gives them the opportunity to develop independence, formulate their own interests and projects in the larger community, and work with organizations connected to social justice and environmental issues. As seniors, students participate in internships, pursue an interest in-depth, and present a thesis project to the SSJE Community as part of their Senior Exhibitions.

Our students have the option to take electives such as languages, art, and PE outside the small school. AP options are available to juniors in AP Environmental Science and seniors in Calculus, Statistics, Physics, and Spanish.

The School for Social Justice and Ecology provides a personalized, interconnected learning environment where faculty members nurture and challenge students to strive for academic excellence.

Our mission is to develop today's youth to be tomorrow's leaders in the development of a wise and just society. Graduates of the School for Social Justice and Ecology will be prepared for college, be knowledgeable about social and environmental issues, and take personal responsibility for seeking change in themselves and in the world.

The exploration of social and ecological issues are embedded within a solid curriculum in mathematics, the sciences, and the humanities. Our integrated, project-based curriculum uses inquiry as a tool for students to see the interconnectedness of all academic principles and their relationship to the real world. Writing, which is integral to all humanities classes across curriculum, focuses on fluency and revision. We support a community of readers to challenge students at a

variety of levels. Math concepts are developed through experimentation with real life situations using manipulatives. Science curriculum uses the scientific method and inquiry to grapple with relevant pressing societal issues and explore possible solutions.

Course Descriptions

Freshman Year

Essential Question

- **9TH GRADE:** "Who am I and how do I fit into this complex society?"

ENGLISH 1A/1B (P)

YEAR • 10 CREDITS

This course focuses on the development of literacy skills and self expression through writing, reading, public speaking, and critical thinking. Through an exploration of the experiences of many different groups in the U.S.A. and globally, students will see their own lives reflected as well as gain a deeper understanding of others. Novels include: *A Step from Heaven* by An Na, *The Color of Water* by James McBride, *Push* by Sapphire, and *Always Running* by Luis Rodriguez, among others.

SOCIOLOGY

YEAR • 10 CREDITS

This course challenges students to investigate and analyze identity issues such as culture, race, ethnicity, gender, and sexuality within the context of the social and historical factors that create them. There is an emphasis on balancing an understanding of oppression and conflict with alliance building in order to instill a commitment to social justice.

GEOMETRY (P)

YEAR • 10 CREDITS

This is a course in plane and solid geometry. Topics include perimeter, area, graphing of linear equations, slope, proofs, problem solving, spatial visualization, volume and surface area or polyhedra and other solids, congruence triangles, Quadratic Formula, perpendicular and parallel lines, trigonometric ratios, similar figures, geometric probability, and circles. Group exercises and peer tutoring help create a unique learning environment that thoroughly develops both end of the academic range. Meanwhile, students become familiar with structured routines during lectures that is most common with the California University System.

ADVANCED BIOLOGY (P)

YEAR • 10 CREDITS

Advanced Biology is a lab science class that fulfills the life science requirement for Berkeley High School as well as the University of California A-G requirement for laboratory life science. We investigate cell biology, genetics, ecology, physiology, and evolution through group work activities, labs, lectures, guest speakers, hands-on activities, projects, and individual assignments that focus on the California state standards for biology. We will focus on the ecological and social issues throughout each unit. Textbook: BSCS Biology: An Ecological Approach.

Sophomore Year**Essential Question**

- ▶ **10TH GRADE:** “How do we understand Social Justice and Ecology on a Global Level?”

WORLD LITERATURE (P)

YEAR • 10 CREDITS

World Literature builds on the skills and knowledge acquired in the Freshperson Seminar. World Literature deepens and complexifies students' understanding of issues like racism, cultural revolution, and ecology on a global scale. This course is

closely aligned with the 10th Grade World History course, and adds a literary and artistic dimension to the focused historical case studies undertaken in that course. Skill-building in reading and writing, as well as vocabulary building, are also ongoing focuses. Above all, this course pushes students to become thoughtful, creative, empathic, and deeply analytical members of a global society. Texts include *Nip the Buds, Shoot the Kids* by Kenzaburo Oe; *Things Fall Apart* by Chinua Achebe; *Persepolis* by Marjane Satrapi; and assorted short stories, poetry, and articles.

WORLD HISTORY (P)

YEAR • 10 CREDITS

In this course we will study some of the major political, economic, and social developments in the world since the late 18th century (i.e., in the modern world). The units are thematic, allowing students to make the connections between the past and the present, as well as to other SSJE courses. Using case studies from different periods in history and different parts of the world, we will look at: the rise of nationalism and democracy; racism; colonialism and imperialism in the shaping of the modern world; industrialization and the development of a global, capitalist economy; war and genocide in the 20th century; and Third World revolutions and movements for self-determination and justice.

ALGEBRA 2 (P)

YEAR • 10 CREDITS

This is the third year in traditional sequence. Topics include linear, quadratic, exponential, logarithmic equations, matrices modeling, functions, graphing, complex numbers, counting and probability. As a segue into Math Analysis, Advanced Algebra is a final chance for students to master the algebra concepts that will follow them into and beyond Calculus. Rigorous individualized exams make sure that each student carries these necessary skills into Math Analysis.

CHEMISTRY (P)

YEAR • 10 CREDITS

Why does soda fizz when you open a bottle? How does a cold pack get cold? Why does popcorn pop? How does the battery in your calculator work? How can we make fireworks with so many different colors? What is nuclear energy and why is it so controversial? The answers to these questions lie in the study of chemistry. Chemistry focuses on understanding the world around us on a particulate level.

Since much of what we will study cannot be seen with the naked eye, we will spend a great deal of time gathering evidence and data through experimentation and then creating models to understand our results. The field of chemistry is the product of generations of intensely creative thought and experimentation, and it contains the seeds of the continuing efforts of humankind to understand, predict, and appreciate the universe in which we live.

Junior Year

Essential Question

- ▶ **11TH GRADE:** “How does your knowledge of Social Justice and Ecology lead you to action?”

AMERICAN LITERATURE (P) YEAR • 10 CREDITS

A close examination of essays, short stories, novels, poetry, and drama. This one-year course considers American Literature and ideas of Puritanism to contemporary America. This course fulfills UC/CSU History (b) requirement.

U.S. HISTORY (P) YEAR • 10 CREDITS

The US History course spends one year on U.S. History from 1900 to the present. The first several weeks of U.S. History include an introduction and background to American History prior to 1900. The first semester ends with the period just prior to the 2nd World War. The second semester covers the period from World War 2 to the present. This course fulfills UC/CSU History (a) requirement.

MATH ANALYSIS (P) YEAR • 10 CREDITS

This course covers function analysis, trigonometric functions and graphs, right triangle and wrapping function trigonometry, including laws of sines, cosines, right triangles, trigonometric identities, complex numbers, polar graphing, DeMoivre’s theorem, vectors, conic sections, parametric equations, the Binomial Theorem, proof by induction, limits, and continuity. A graphing calculator is required. The recommended models are Texas Instruments’ T183+, T184, T186, and T189 or the Casio 9850GX+.

AP ENVIRONMENTAL SCIENCE (AP) YEAR • 10 CREDITS

This is an introductory college level course in environmental science that uses inquiry to explore ecological issues. Students will use their knowledge

of both Biology and Chemistry to investigate ecological issues. Throughout the course students will be participating in laboratory experiments in the classroom as well as field studies outside the classroom. The interdisciplinary curriculum draws on interrelationships between the natural and social sciences, and more global considerations, such as environmental justice and ethics. Topics covered include ecosystems, habitat restoration, renewable energy, climate change, and sustainable living.

Senior Year

Essential Question

- ▶ **12TH GRADE:** “What am I doing to affect change in my community, country and the world?”

COMPOSITION/ GENRE IN LITERATURE (P)

YEAR • 10 CREDITS

COMPOSITION is a course designed for students in the academic program who need to reinforce basic concepts of composition. Language and literature act as catalysts for the writing. Attention is given to grammar and mechanics, vocabulary, spelling, and usage; however, the primary aim of the course is to provide students with the experience of writing, to assist them in refining that writing toward the goal of clear, coherent, unified, satisfying essays.

GENRE IN LITERATURE is a course for those students interested in the close analysis of literature, focusing on specific genre. Students read representative works within the genre, discuss themes and elements, research literacy criticism surrounding the genre and write several analytical essays. Student preference and availability determines genre.

GOVERNMENT/ECONOMICS (P) YEAR • 10 CREDITS

GOVERNMENT is a one-semester course that seeks to explain how our political system works. Focus is on current issues as Congress, the presidency, state legislatures, and the judicial systems address them. Students prepare arguments, debate social issues, and stimulate the functions of Congress and the courts in a model senate and Supreme Court. Students explore the theme of social justice through a focus on the question: Is democracy necessary for a socially just and sustainable society?

ECONOMICS is a one-semester class that reviews both macro and micro economic principles. In addition, the student reviews some general economic theories and economic history. The goal of the class is to prepare the student to enter American society with a general knowledge of how our economic system works and to place that knowledge in some comparative and historical context. Essential question for the course: Is capitalism compatible with a sustainable society?

ECO-LITERACY AND SOCIAL JUSTICE SEMINAR/BEST HISTORY (P) YEAR • 10 CREDITS

This senior level course brings together the social justice and Ecology themes from the 4 years in SSJE. Students will put together their own research project and complete a Thesis project from that assignment. This course is a UC approved “g” elective course. During this Course students will participate in internships within the Berkeley community.

Senior Math Options

Students who successfully complete Math Analysis with final grades of “C” or better have the option to take one of the following three courses. These courses are offered by the BHS mathematics department (see course descriptions in the “Mathematics” section of the Course Catalog).

- ▶ **AP STATISTICS A/B (AP)**
- ▶ **AP CALCULUS AB 1/2 (AP)**
- ▶ **AP CALCULUS BC 1/2 (AP)**

Senior Science Options

Students who successfully complete Advanced Biology and Advanced Chemistry with final grades of “C” or better have the option to take one of the following courses. These courses are offered by the BHS science department (see course descriptions in the “Science” section of the Course Catalog).

- ▶ **AP PHYSICS (AP)**
- ▶ **PHYSICS (P)**
- ▶ **HONORS ANATOMY (P)**

All Grades

STUDENT LEADERSHIP YEAR • 10 CREDITS

Open to any grade level, the purpose of this course is to teach effective and ethical leadership skills.

JACKET YEAR • 10 CREDITS

Students in this course produce the school newspaper and make up the Jacket staff.

YEARBOOK PUBLICATION YEAR • 10 CREDITS

The yearbook course produces the yearbook once a year. Students learn graphic design, business management, and how to write in a yearbook style. The requirements of the course include a willingness to work hard, work after school when necessary and sometimes on weekends in order to meet deadlines. **PREREQUISITE:** Teacher recommendation. This course does not fulfill BHS Senior English elective requirement.