KIRBY SCHOOL
GRADES 6 THROUGH 12

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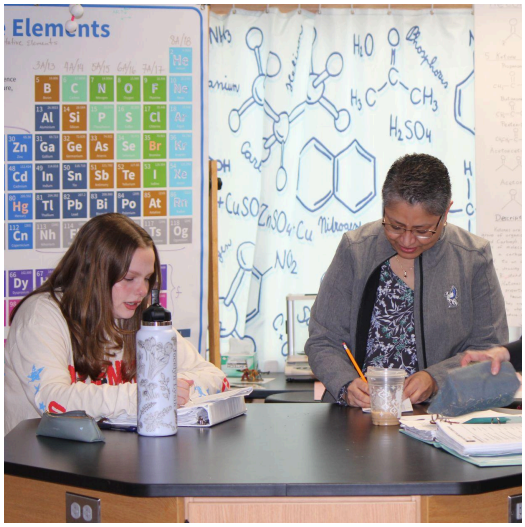

CURRICULUM CATALOG

2024-2025

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OVERVIEW

Mission Statement

Kirby empowers students to shape their futures with confidence. Students in our diverse community learn to think critically, develop their creativity, and achieve with thoughtfulness and respect.

Core Values

We are a community of belonging.

- We are equitable, inclusive and collaborative.
- We embody diverse perspectives.
- We care for ourselves and each other.
- We create safe spaces for everyone to be themselves.

We find joy in creativity and academic challenge.

- We are curious and have passion for knowledge.
- We invest in ourselves.
- We believe every student is unique and has a different path.
- We are adaptable and responsive.
- We value out of the box thinking.

We nurture confidence and critical thinking for a changing world.

- We are authentic in all that we do.
- We trust ourselves and are genuine.
- We have courage and tenacity.
- We prepare students for college and their future.

Diversity Statement

The Kirby School embraces both the concept and the embodiment of diversity within its educational community. Beyond the ethical imperative to create opportunity for a full range of families in the greater Santa Cruz area, the School believes that diversity fundamentally enhances the quality of education for all students. Diverse socio-economic backgrounds, races and ethnicities, opinions, genders, sexual orientations, physical abilities, religious beliefs, and learning styles not only enliven the academic environment but serve vital imperatives of the School's mission and strategic plan:

- To support the School's fundamental value of mutual respect within an inclusive environment
- To collaborate with persons of varying perspectives
- To instill multi-cultural awareness and global literacy
- To foster a sense of world citizenship
- To prepare students for the diverse higher education, employment, and cultural environments of the present and future

Kirby believes that the creation of a diverse community is not a destination, but, rather, it is a conscious, ever-deepening process of:

- Infusing diverse voices and perspectives within the Curriculum
- Ensuring that all students' voices are respected and respectful when expressing social, political, or religious perspectives
- Fostering curiosity about and respect for others within our community
- Creating a safe space where differences are not only accepted at the surface level but explored and understood in depth
- Challenging preconceptions and prejudices within a respectful academic environment
- Allocating effort and financial resources to admit and retain students who will enrich the diversity of the student community
- Allocating effort and financial resources to recruit and retain teachers, administrators, and staff who will enrich the diversity of the community

MIDDLE & HIGH SCHOOL OVERVIEW

Middle and high school education at Kirby is characterized by active learning that fosters curiosity, creativity, and critical thinking. Students thrive in small classes where knowledgeable and enthusiastic faculty guide their intellectual and personal development.

Middle School: Grades 6 to 8

Kirby's middle school provides a well-balanced and developmentally appropriate transition from elementary school to the challenges of a rigorous college preparatory high school program. Our sixth, seventh, and eighth graders are provided with a strong academic foundation and mentorship to explore their creative, intellectual, and physical potential in a lively and supportive environment.

Middle school students build their educational foundation with courses in English, history, mathematics, science, world language, and the arts, and develop mind-body awareness through the Social Emotional Learning and Physical Health (SELPH) and athletics programs. Faculty help students develop important critical-thinking and problem-solving skills and teach them how to work effectively, both independently and in groups. Assigned homework averages 1 to 1.75 hours per night.

Sixth through eighth grade students receive embedded study skills training in all classes. The middle school study skills training breaks down the various skills into organization and time management, planning, note-taking techniques, and test-taking strategies. Self-advocacy is also developed with the purpose of taking responsibility for one's learning.

The sixth grade is designed as a bridge between elementary and middle school and provides a foundation for the rest of their middle and high school experience. Sixth graders take their classes as pass/fail without letter grades, though they do receive significant feedback on their performance in the form of standards-based grading. In seventh grade, students begin the experience of being graded on their work. All middle schoolers may also join the school Chorus and participate in theater productions.

In seventh and eighth grades, students explore art, drama, dance, and music. They may also begin to tailor their individual education by beginning the study of a high school-level world language. Eighth-graders with a particular interest in the arts may submit a portfolio to apply for our high school visual art class or audition for placement in the high school choir or instrument ensemble.

Through parent/teacher conferences and other regular communication, teachers work closely with middle school students' families to build the critical parent/teacher partnership.

High School: Grades 9 to 12

Balanced and innovative curricula fuse traditional academics, the arts, and technology. An extensive range of electives across all disciplines affords opportunities for comprehensive study and prepares students for the social, political, and economic realities of the twenty-first century. All courses share common goals: reading analytically, writing clearly, questioning actively, and thinking critically.

Students may pursue a general college preparatory path or may consider focusing their study through a unique program of Intensive Paths in one of the four disciplines: the Humanities, Science and Technology, Languages, or the Arts. Assigned homework averages 2 to 3.5 hours per night depending on grade level and combination of courses. Advanced study is available through Honors and Advanced Placement courses. With a few exceptions, Kirby's high school level courses are certified to meet "a-g" admission requirements of the University of California system, and graduation requirements exceed University of California admission prerequisites. The innovative elements of Kirby's program ensure a rich educational experience and prepare students for success at the colleges/universities of their choice.

DISTINCTIVE FEATURES OF OUR PROGRAM

Kirby's college preparatory educational program has several distinctive features:

Small classes (averaging twelve students) provide flexible pacing and individual attention and afford teachers and students the opportunity to forge close working relationships. Teaching is vibrant, innovative, project-based, and student-centered.

We believe that creative expression is fundamental to the human experience and that work in the arts enhances learning in other areas. Visual and performing arts are an integral part of the academic curriculum, offering students the opportunity to broaden their horizons and gain new skills.

Study of high school level world language begins as early as seventh grade.

Math placement is based upon level of mastery (not grade level), enabling students to work at a pace appropriate for them.

Optional high school Intensive Path programs provide guidance for in-depth study in the humanities, science and technology, languages, or the arts. Information on each is available in this catalog in the respective academic division.

High school students choose from an array of rotating electives and advanced coursework; juniors and seniors are offered a wide range of specialized, semester-long English courses to complete their English requirements.

Learning goes beyond the classroom, engaging students' natural enthusiasm and creativity. Budding writers manage two periodicals, one for fiction and creative writing, and one for technical and nonfiction writing. Music students have the opportunity to work in Kirby's recording studio. Art and music students perform in multiple school and community productions and competitions. Young engineers design and bring projects to life in our FabLab. These are just a few examples of the many ways that students demonstrate and apply their learning.

INTENSIVE PATH PROGRAM OVERVIEW

High school students with a passion for the humanities, science and technology, languages, or the arts can choose an Intensive Path of study. Graduation requirements differ from the General Path, but all Path requirements meet or exceed UC entry requirements. Further details about each path are outlined under their respective academic division sections in this catalog. A comparison of the Unit Requirements for each Path is provided as part of our Graduation Requirements. Students with interest in more than one Path can design a dual Path in collaboration with the Academic Dean. For all Intensive Paths, students work with a faculty mentor and complete a culminating project or internship. Completion of the program is noted on the student's transcript.

The Humanities Intensive Path (HIP)

The Humanities Intensive Path (HIP) enables students who are passionate about history, writing, and literature to explore those areas in more depth. With the guidance of a faculty mentor, HIP students plan a course of study and identify a focus that leads to a senior project (ex: drafting a chapter of a novel, expanding on research started in a HUSHP paper, etc.).

The Science and Technology Intensive Path (STIP)

The Science and Technology Intensive Path (STIP) provides a program of study for students wishing to pursue more in-depth study of science, math, and computer sciences and reach a level of mastery in these areas that will position them for advanced college-level work. Each STIP student works closely with a faculty mentor to develop and implement a rigorous and comprehensive course of study, including a senior project.

The Languages Intensive Path (LIP)

The Languages Intensive Path (LIP) is for students interested in intensive study of at least one language other than English (ex: Spanish, Latin, American Sign Language). Students completing this intensive path graduate with both advanced linguistic abilities and a greater understanding of other cultures. Senior projects for LIP are especially open to interdisciplinary approaches.

The Arts Intensive Path (AIP)

The Arts Intensive Path (AIP) emphasizes the study of fine or performing arts. AIP students acquire the background, skills, and knowledge necessary for entering a college fine or performing arts program and may use the Path to develop a portfolio for college admissions. Under the mentorship of a faculty mentor, students choose a general arts program or concentrated study in a specific discipline. AIP students also create and present a final project or performance.

Customized Intensive Path

In some cases, students may be strongly motivated to dive into an intensive path of learning where the content is naturally interdisciplinary, involves some aspect of study that is not strongly represented in Kirby's regular academic programming, or not within any of the IPs listed above. One example of this would be a focus on the language used to describe climate change around the globe, which would entail work in different languages (LIP), writing analysis (HIP), and meteorological study (STIP). Students desiring to develop their own customized or dual paths should set up an appointment with the Academic Dean.

GRADUATION REQUIREMENTS

To graduate, students must fulfill at least 94 units of academic credit in grades 9-12. The normal high school course load is six academic courses, and students may take a maximum of seven core courses per semester. Refer to the Course List for courses that may be taken as an eighth class. Students wishing to take summer or evening courses elsewhere, or to pursue alternative learning opportunities for credit, must receive prior approval from the Academic Dean.

UNITS[1]

	General Path	HIP Path	STIP Path	LIP Path	AIP Path	NOTES
ENGLISH	16	16[2]	16	16	16	
HISTORY	12	16[2]	12	12	12	Must include U.S. History
MATHEMATICS	12	12	16[3]	12	12	Completion through or beyond Algebra 2, if needed, to fulfill 3 years
LABORATORY SCIENCE	12	12	16	12	12	Must include Biology
WORLD LANGUAGE	8	8	8	20[4]	8	All in one language, except for LIP students. Through Level 3 recommended
VISUAL ARTS	4	4	4	4	4	Art 1 is a prerequisite for all Art courses
PERFORMING ARTS	4	4	4	4	4	4 units in Music, Theater, and/or Dance
FITNESS/WELLNESS	4	4	4	4	4	Contract Fitness is 1 unit per semester[6]
HEALTH	2	2	2	2	2	
GENERAL ELECTIVES[7]	20	12	6	10	4	
ELECTIVES WITHIN INTENSIVE PATH		6	8		18[5]	
SENIOR PROJECT		2	2	2	2	2 units are equal to 60 hours of student academic work
TOTAL	**94**	**98**	**98**	**98**	**98**	

1. Typically, yearlong courses earn 4 units and semester courses earn 2 units. However, some courses meet for reduced hours and, therefore, earn half credit (1 unit per semester). Refer to the Course List for courses that earn half credit.
2. HIP students must complete either Honors US History Practicum or AP English Literature & Composition
3. STIP students must complete Pre-Calculus. Any math completed beyond Pre-Calculus may be counted toward the STIP elective requirements.
4. LIP students must complete five years of high school language with one language through Level 4. High school level languages taken in Middle School are credited towards the IP requirement, but do not count towards the total high school graduation unit requirement. At least 3 years of language must be completed during High School.
5. AIP students may use Play Tech and Play Performance roles for up to 4 units toward the AIP elective requirements, even though they do not fulfill the Performing Arts requirement for graduation.
6. Students must engage in 3 hours per week of approved activity for one unit of contract fitness credit.
7. Any course in any discipline that is above and beyond the graduation requirement may fulfill the general elective requirement.

SAMPLE MIDDLE & HIGH SCHOOL COURSE SEQUENCE

(This is an example. An individual student's course sequence may vary based upon interest and previous academic background.)

MIDDLE SCHOOL				HIGH SCHOOL				
SUBJECT	**GRADE 6**	**GRADE 7**	**GRADE 8**	**STANDARD COLLEGE PREP GRADUATION REQUIREMENTS***	**GRADE 9**	**GRADE 10**	**GRADE 11**	**GRADE 12**
ENGLISH	ENGLISH 6	ENGLISH 7	ENGLISH 8	**4 YEARS, TAKEN GRADES 9-12**	ENGLISH 9	ENGLISH 10	ENGLISH 11: CHOICE[2]	ENGLISH 12: CHOICE[2]
HISTORY	ACADEMIC SKILLS	HISTORY 7: ANCIENT CIVILIZATIONS	HISTORY 8: UNITED STATES	**3 YEARS, TAKEN GRADES 9-12**	HISTORY 9: WORLD HISTORY	HISTORY 10: MODERN WORLD (HONORS OPTION)	HISTORY 11: UNITED STATES (HONORS OPTION)	ELECTIVE[3]
MATH[1]	MATHEMATICAL PROBLEM SOLVING	PRE-ALGEBRA	ALGEBRA 1	**3 YEARS (ONE YEAR EACH OF ALGEBRA 1, GEOMETRY, & ALGEBRA 2)**	GEOMETRY	ALGEBRA 2	ELECTIVE[3]	ELECTIVE[3]
SCIENCE	SCIENCE 6: EARTH or LIFE SCIENCE	SCIENCE 7: EARTH or LIFE SCIENCE	SCIENCE 8: PHYSICAL SCIENCE	**3 YEARS LAB SCIENCE, TAKEN GRADES 9-12**	BIOLOGY	CHEMISTRY	PHYSICS	ELECTIVE[3]
WORLD LANGUAGE[1] / ELECTIVE	STEAM	LATIN 1	LATIN 2 OR SPANISH 1	**2 YEARS OF THE SAME LANGUAGE, TAKEN GRADES 9-12**	WORLD LANGUAGE	WORLD LANGUAGE	ELECTIVE[3]	ELECTIVE[3]
ARTS	MS ARTS ROTATION	MS ARTS ROTATION	MS ARTS ROTATION OR HS ARTS	**2 YEARS, TAKEN GRADES 9-12 (4 UNITS EACH OF VISUAL AND PERFORMING ARTS)**	ARTS CHOICE[2]	ARTS CHOICE[2]	ELECTIVE[3]	ELECTIVE[3]
FITNESS & WELLNESS	SOCIAL EMOTIONAL LEARNING AND PHYSICAL HEALTH[4]	SOCIAL EMOTIONAL LEARNING AND PHYSICAL HEALTH[4]	SOCIAL EMOTIONAL LEARNING AND PHYSICAL HEALTH[4]	**HEALTH AND 4 UNITS OF FITNESS**	HEALTH / SPORTS / FITNESS[4]	SPORTS / CONTRACT FITNESS[4]	SPORTS / CONTRACT FITNESS[4]	SPORTS / CONTRACT FITNESS[4]

*This reflects Kirby's "standard" high school graduation requirements. Intensive Paths are offered in the Humanities, Science/Technology, Languages, and the Arts.

NOTES:

1. Math and language placement is by level of mastery, not by grade. Students are placed in the appropriate level after a placement test. Taking Algebra 1, Geometry, or Algebra 2 in middle school applies toward the three-year high school math requirement.
2. "Choice" indicates that a class in that subject area is required, but students may choose from the electives offered within that discipline.
3. Any course in any discipline that is above and beyond the graduation requirement may fulfill the general elective requirement.
4. SELPH is required in middle school. One semester of Health is required in high school. High school students are required to complete 4 units of fitness and may take two semesters of fitness class or participate in four semesters of after-school sports or "Contract Fitness" to meet this requirement.

MIDDLE & HIGH SCHOOL COURSE LIST 2024-2025

English

English 6
English 7
English 8
English 9
English 10

English 11-12 choices:
AP English Literature & Composition: Multicultural US Lit
Banned Books (s)
Creative Writing (s)
Hist/Lit/Art: Latin America (s)[H]

History

History 7: Ancient History
History 8: U.S. History
History 9: World History of the Middle Ages
History 10 Choice: Modern World History or Honors Modern World History
History 11* Choice: U.S. History or Honors U.S. History Practicum
AP Comparative Government

Science

STEAM (6th)
Science 6/7: Life Science
Science 8: Physical Science
Biology (9th)

Grade 10-12 choices:
Chemistry (10th*)
Honors Advanced Chemistry
Honors Environmental Science
Physics
Honors Physics

Technology (9-12)

Introduction to Robotics (s)
Engineering & Design Thinking
AP Computer Science Principles
Yearbook † ^

Math

Grade 6-8 choices:
Mathematical Problem Solving
Pre-Algebra

Grade 6-12 choices (H.S. Credit):
Algebra 1
Geometry
Algebra 2
Financial Mathematics
Number Theory † ^
Pre-Calculus
AP Calculus BC
Honors Multivariable Calculus

World Language (H.S. Credit)

Grade 7: Latin 1

Grade 8 choices:
Spanish 1
Latin 1 and 2

Grade 9-12 choices:
American Sign Language 1 (s), 2 (s), 3 (s), and 4 (s)
Spanish 1, 2, and 3
Honors Spanish: Latin American Film and Culture
Latin 1, 2, and 3
Honors Advanced Latin Literature

Middle School Arts Rotation (6-8)

Grades 6 & 7: Dance (s)
Grades 6 & 7: Art Technology (s)
Grade 8: Dance (s)
Grade 8: Music Appreciation (s)

Visual Arts (9-12)

Art 1: Foundation ◊
Art 2: Intermediate 2-D Art
Art 3: Portfolio Preparation
Book Arts
Digital Photography (s)
Darkroom Photography (s)

Theater Arts (9-12)

Intro to Drama
Advanced Drama
Theater Tech A (s)
Theater Tech B (s)

Music

Chorus † (open to grades 6-8)
String Methods † ^ (open to grades 6-12)
Chamber Orchestra (by audition) † ^
Jazz Ensemble (by audition) † ^

Grade 9-12 choices:
Introduction to Guitar (s)
Introduction to Piano (s)
Chamber Choir (by audition) ◊
Jazz Choir (by audition) † ^
AP Music Theory

Fitness, Wellness & Human Dev.

Academic Skills (6th*)

Grade 6-8:
SELPH 6, SELPH 7, SELPH 8

Grade 9-12 choices:
Health & Wellness (s) †
High School Fitness (s) †
Contract Fitness † ^

Special Programs

Academic Language Support † ^
Drama Productions
Student Council / Government Cabinet †
Teaching Assistantship (s) † ^
Independent Study
Internship
Guided Research
External Courses

List of Honors & AP Courses

AP Calculus BC
AP Comparative Government
AP Computer Science Principles
AP English Literature & Composition: Multicultural US Lit
AP Music Theory
Honors Advanced Chemistry
Honors Advanced Latin Literature
Honors History 10
Honors Multivariable Calculus
Honors Physics
Honors Spanish: Latin American Film and Culture
Honors U.S. History Practicum

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* typically taken in this grade † may be taken as an 8th class [H] interdepartmental with History [A] interdepartmental with Art (s) semester-long course
^ half-credit course (1-unit per semester) "H.S. Credit" = High School credit when taken in 7th or 8th grade ◊ Grade 8 students may apply to take in place of Middle School Arts Rotation

HUMANITIES

The Humanities at Kirby includes the English and History departments. Both departments reinforce critical thinking skills, analytical reading skills, and expository and creative writing skills.

The Humanities Intensive Path (HIP)

The Humanities Intensive Path (HIP) enables students who are passionate about history, writing, and literature to explore those areas in more depth. With the guidance of the Academic Dean and their faculty mentor, HIP students plan an interdisciplinary course of study and identify a focus that leads to a senior project. The graduation requirements for HIP students are the following in addition to the normal breadth requirement for other subject areas:

- An additional year of history study (for 16 total units)
- Six additional elective units in either English or history (must include HUSHP or AP English)
- A senior project or internship (2 units)
- Attendance at a minimum of 3 community events related to the student's field of study

English

The development of writing skills is a primary objective in every English course. In sixth grade, students learn to construct short essays, and by eighth grade students write 4-5 page essays. High school students practice and master a range of writing types, including literary analysis, timed writing, fiction, poetry, personal essays, and research projects. By graduation they produce meaningful, well-written, and well-developed papers. Teachers use multiple drafts, one-on-one conferencing, peer revision, and prompt, detailed feedback to develop each student's writing and critical-thinking skills.

Language skills are cultivated through the teaching of vocabulary, grammar, reading comprehension, and oral expression. All English courses teach vocabulary, and grammar instruction is integrated with writing assignments in all grades. In addition to stressing writing and language skills, courses engage students in the study of great works of literature. Several literary genres—novels, short stories, plays, poetry, nonfiction, and essays—are explored in both traditional and modern works. These works are written by a wide range of authors of different cultural backgrounds, and special care is taken to ensure that the selection of required readings represent important voices that are often underrepresented in places of learning.

Eleventh and twelfth grade students choose from a number of rotating semester-long and yearlong courses, enabling them to study topics of interest. Course offerings are summarized in the Course List.

English 6

Students are introduced to a variety of experiences through literature while they develop writing skills and improve their vocabulary. Ample opportunity is provided to practice many forms of writing, including literary response and analysis, creative stories, and journaling. Projects and presentations allow students to demonstrate comprehension of literary themes. With each novel, students identify key parts of the story, from exposition to resolution. The reading list includes *Star-Crossed*, *When My Name was Keoko*, and *The Circuit*.

English 7

Literature in this course is focused on diversity and giving voice to BIPOC authors and characters. In addition to reading and discussing books, students use separate texts to study grammar and vocabulary. Overall skill development includes close reading/annotating, gathering evidence, poetry writing, and active use of figurative language. Students write analytical essays, give speeches, and complete creative projects to demonstrate comprehension of textual themes and cultural context. Grammar study is intensive and evaluated according to the students' own writing development as well as through in-class exercises. The reading list includes *Touching Spirit Bear*, *Brown Girl Dreaming*, *Amal Unbound*, and *Farewell to Manzanar*.

English 8

Students explore an author's use of literary devices and practice implementing such techniques into their own writing to promote clarity, sophistication, and effectiveness. They read, discuss, and write extensively about *Animal Farm*, *The Night Diary*, *March*, and *Speak*. In addition to the appreciation and analysis of texts, the course enhances students' ability to articulate their understanding of literature through vocabulary development, creative writing, and oral presentation.

English 9

The thematic focus of this course is the examination of self in relation to family, community, and culture. Students consider their place in the world and how they relate to characters of diverse cultures, economic classes, time periods, and perspectives. The readings are connected by the experiences of youth and coming of age. The reading list includes flash fiction stories by Gabriel Garcia Marquez, Miranda July, and Jamaica Kincaid, and longer works such as *Jellicoe Road*, *Romeo and Juliet*, and *American Born Chinese*. Students write, read, and discuss literature and literary concepts in each class. Meets UC "b" requirement.

English 10

English 10 prepares students for eleventh- and twelfth-grade level coursework. Students practice a range of skills, including textual analysis, critical thinking, research, oral presentation, and writing for various purposes and audiences. Course texts span a range of genres including poetry, fiction, drama, memoir, and nonfiction. Beginning with a unit focused on diction and tone in personal narratives, the course widens its focus to examine broader contexts: race; gender in literature and culture; class, family, and "the American Dream"; and cultural collisions and hybrid identities in postcolonial literatures. Assignments provide opportunities to think and write creatively (memoir, poetry, and short fiction), persuasively, and analytically (essays on literary texts). Students learn to identify and use rhetorical modes, literary techniques, and careful diction while building vocabulary and practicing clear and engaging writing. Texts include poems from the seventeenth to the twenty-first centuries; short stories by a range of authors including Chinua Achebe, Chimamanda Ngozi Adichie, James Baldwin, Charlotte Perkins Gilman, Carmen Maria Machado, and Viet Thanh Nguyen; and several major texts: *Death of a Salesman*, *A Raisin in the Sun*, *Woman Hollering Creek*, and *Purple Hibiscus*. Meets UC "b" requirement.

Eleventh and Twelfth Grade English Choices

Eleventh and twelfth grade students choose two semester-long courses each year from a menu of electives that vary from year to year. While the themes and literary selections sometimes change, all courses prepare students for college-level writing and critical thinking. All English 11/12 electives meet UC "b" or "g" requirements.

AP English Literature & Composition: Multicultural US Lit (Prerequisite: A- or better in previous English class) (yearlong)

This course on multicultural U.S. literature explores the literature, culture, and national identity of the United States from settlement (seventeenth century) to the late twentieth century, focusing on how and to what extent Africans and African Americans, Native Americans, Japanese Americans, and Chicanos have found places in the "mainstream" of American

civic, economic, and political life. As they read poetry, drama, autobiography, and novels, students examine how literature reflects and shapes debates over Native American-settler relations, race and slavery, the roles of women, the inclusion/assimilation of immigrants, and what it means to be an "American." Students identify and use rhetorical devices, literary techniques, and careful diction while building vocabulary and practicing clear and engaging writing in both short responses and longer, formal analytical essays. In writing and discussion, students think and write analytically and persuasively (with strong emphasis on literary analysis). Students also practice composing brief timed essays in preparation for the AP English Literature and Composition exam. Students read a variety of short works, including poems, essays, and speeches, in addition to the following full-length works: *Tracks*; *Narrative of the Life of Frederick Douglass, an American Slave*; *Incidents in the Life of a Slave Girl*; *No-No Boy*; *Zoot Suit*; and *The Bluest Eye*. This AP course has College Board approval. Students enrolling in AP English must have received at least an "A-" in their prior English course. If a student receives a "B+," he or she may petition for acceptance into the AP course. The petition must include a recommendation from the student's current English instructor. The Academic Dean makes the final decision as to whether the student is admitted into the AP class. Meets UC "b" or "g" requirements.

Banned Books

In this course, students read three critically acclaimed works that have either been banned or targeted for censorship. Students discuss the reasons each work was challenged and use research to place the readings in a historical context (for example, *I Know Why the Caged Bird Sings* and African-American life in the American South during the 1930s). They also discuss the idea of intellectual freedom and what that concept means in their own lives. Students should be prepared to research, analyze, present on, and write about controversial subject matter (books are often banned for references to sexuality, violence, drug use, or harsh language). Meets UC "b" or "g" requirements.

Creative Writing

Using model texts for a variety of writing assignments in two genres (short fiction and poetry) students learn from the poetic and literary techniques of published writers and write a series of assignments designed to use those techniques. Coursework includes both reading and writing. Writing ranges from brief informal writing "warm-ups" and writing experiments, to responses to assignments (poems and parts of short stories) and revisions thereof. Students write multiple drafts of writing assignments, receive feedback, both written (from the instructor) and oral (from peers in writers workshop). Students have multiple opportunities to read their work aloud in writers' workshops throughout the semester, as well as to collect their best revised work in a final portfolio. Meets UC "b" or "g" requirements.

Hist/Lit/Art: Latin America

This comprehensive course delves into the rich, intricate history and culture of Latin America, exploring its geography, society, and art through the lens of its vibrant musical traditions. Students are introduced to a diverse array of musical genres, from indigenous folk music to classical and popular styles like Cumbia, Choro, Salsa, and Samba as they learn about the history and development of these genres and their unique instrumentation. Through readings on topics like the impact of colonization and revolution on Latin American communities and artists, students gain a deeper understanding of the region's complex social and cultural landscape. Texts include a variety of poetry, short stories, and the following non-fiction text: Carol A. Hess's *Experiencing Latin American Music* (2018). Meets UC "b" or "g" requirements.

Writing and Reading Support

Kirby cares about graduating exceptionally strong writers and readers. For our students who need more support in English, we offer Academic Language Support as a class in addition to their primary English course. Academic Language Support is a requirement for English learners and is recommended for other students who need more support with the foundational skills of English. The course is graded Pass/Fail.

Academic Language Support (yearlong, 2 units)

This course is open to all grade levels and sets students up for success by providing tailored English-language help and support. Students gain valuable skills in grammar, mechanics, and other foundational English knowledge. This class enables a greater level of confidence and achievement in classes at Kirby. One class meeting per week is tailored for students in middle school, the other for high school.

History

The study of history at Kirby is global in its approach and grounded in the chronological study of human activities from ancient times to the present. History courses cover dates of battles and exploits of kings, but students also study the religious beliefs, philosophical values, aesthetic sensibilities, and the cultural mores of each era and place. Furthermore, the histories of those traditionally "without history"—the women, the children, the poor, and cultures outside of the mainstream—are studied to provide a fuller sense of human endeavor. Analytical and historiographical skills, such as recognizing the importance of historical context and identifying change and continuity over time, are stressed in all grades.

History 7 focuses on Ancient Civilizations, and History 8 on U.S. History. History 9 and 10 pick up the chronological narrative of world history begun in History 7 and carry it through the medieval, early modern, and modern eras, surveying a wide range of civilizations and global perspectives. In tenth, eleventh, and twelfth grade, students are given the choice of regular or AP/Honors level courses. The history choices at the twelfth grade level rotate regularly and ask students to use their foundational study of world and U.S. History to understand their rights and obligations as civically-engaged citizens and to understand both national and global economics.

Each year's course comprises a survey of major movements and events combined with in-depth studies of selected areas of interest. At each level, students undertake individual research projects that develop valuable skills and add greater depth to the era. Class format includes lectures, discussions and seminars, group study activities, student presentations, debates, mock trials, slide shows, and films. In all grades, but especially during middle school years, assignments and course expectations are designed to give students opportunities to practice such skills as note taking, material organization, time management, test-preparation techniques, cooperative skills, and clear oral and written expression.

In almost all courses, a general text provides overall structure to the course content. Extra readings, such as primary sources, secondary articles, literature, mythology, and other voices from the past promote a more vivid understanding of remote historical ages. These readings train students to approach texts critically, identify bias, practice historical analysis, and synthesize diverse voices and perspectives.

History 7: Ancient World

This course teaches both ancient history and historical inquiry. The year begins with the study of hominins, the development of culture, and the slow establishment of small agrarian settlements, illustrating, in part, the often-forgotten fact that the majority of human existence was not within the organization of civilization. Next, students move on to explore what constitutes civilization. The remainder of the course focuses on ancient civilizations, with special emphasis on the Ancient Near East and ancient China. The focus on each civilization may include its geography, art, architecture, religion, social customs, inventions, laws, politics, writings, and important people. In this course, students practice public speaking, writing, and research skills through various projects and assignments. Students can expect at least two long-term research projects as well as mini-projects designed to improve their ability to think as historians.

History 8: US History

History 8 is a broad survey of U.S. history from Pre-Colonial Indigenous Societies of North America to the changes of the early 2000s. The class covers major events and figures as well as daily life, social and political movements, and the experiences of a wide variety of Americans, examining the impact they have had on the formation of American ideals and beliefs and how the nation itself has grown and evolved. This class emphasizes the use of primary sources, laying a strong foundation for understanding and using them in historical research and writing, including being alert to possible bias.

Research and analytical skills are emphasized through the use of a variety of writing assignments, class presentations, and assessment of current news events and how they relate to U.S. history.

History 9: World History of the Middle Ages

History 9 explores world history from ancient Rome to the dawn of the Renaissance. The principal units of study focus on the Roman Republic and Empire, the Han and Song Dynasties in China, Hinduism and Ancient/Medieval India, the rise of Judaism, the rise of Christianity, the rise of Islam, medieval and Renaissance Europe, and medieval West Africa. Students also undertake individual research projects culminating in a formal essay or an oral presentation. This research-writing focus is intended to give Kirby high school students a strong foundation in research techniques, proper attribution of sources, formation of well-supported arguments, and clear self-expression. The historiographic techniques of examining sources for bias and considering completeness and balance in the historical record are also stressed. Meets UC “a” or “g” requirements.

History 10 – Student Choice:
Modern World History or honors Modern World History

History 10: Modern World History

The main theme of this course is globalization in the modern era from 1400 to the present. Students examine how relations between people and their communities, people and their rulers, people and their environment, people and their god, and relations between neighboring and distant communities changed as a result of changes in economic and political relations, changes in social and political ideas, evolutions in religious beliefs, and developments in science and technology. In the West these vast forces of change are called Capitalism and Democracy, the Enlightenment, the Reformation and the Industrial Revolution but in this class these forces are examined from a global perspective. Students are expected to evaluate competing theories of modern historical events using a combination of concepts discussed in class, overviews provided in the textbook and primary source material. Meets UC “a” or “g” requirements.

Honors History 10: Modern World History

This course covers the modern era from the Conquest of the Americas to the present. The course begins with an investigation of the causes and consequences of the European Conquest of the Americas, in which students evaluate competing scholarly theories on the outcome of historical events using primary documents. From there students turn their attention to the European religious revolutions, the Age of Enlightenment and Revolutions, focusing primarily on France, as well as the onset of European global domination instigated by the Industrial Revolution. The primary focus of our study of the Age of the World Wars is on the rise of ideological mass politics (liberal, communist, and fascist) and its contribution to the political, social, and economic complexion of the modern world. The development of modern political, economic, and social institutions undergirds the entire course, with a special emphasis on popular sovereignty, economic interdependence, and nationalism. The Honors section is distinguished from the standard section primarily by the rigor and frequency of primary source readings and the intensity of preparation for college-level analytical writing. Meets UC “a” or “g” requirements.

History 11 – Student Choice: U.S. History or honors U.S. History practicum

United States History

This course surveys U.S. history from the establishment of the early American colonies to the changes of the early 2000s, considering how those facts fit into the broader themes and ideas that shape our history. While the main focus of the class is on major events and figures, attention is paid to daily life, social and political movements, and the experiences of a wide variety of Americans. Some people, time periods, and events are looked at more closely than others as a way to illustrate a variety of historical themes. This approach encourages students to develop both depth and breadth in their understanding

of our history. The class continues to develop the students' skills in using primary sources and being alert to possible bias. Research and writing skills are emphasized through the use of a variety of writing assignments, class presentations, and assessment of current news events and how they relate to U.S. history. Meets UC "a" requirement.

Honors United States History Practicum (Prerequisite: A- or better in previous History class)

This course is a research-and-writing intensive course on the History of the United States from pre-Columbian times to the present, with relatively equal emphasis on political, economic, and social history. Readings come from college-level textbooks, collections of primary source documents, and scholarly articles. Students spend the majority of their time doing research (reading/document analysis), and writing 4 argumentative research papers over the course of the year. Students are expected to engage in frequent seminar-style discussions, take excellent notes from reading, and plan and execute papers on topics chosen in conjunction with the teacher. This course is designed to strengthen historical, research, writing, and critical-thinking skills and prepare students for the type of work that historians do in university and beyond. Meets UC "a" requirement.

History Electives

AP Comparative Government (yearlong)

The AP course in Comparative Government introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, show available institutional alternatives, explain differences in processes and policy outcomes, and communicate to students the importance of global political and economic changes. Students employ several analytical frameworks to identify problems and analyze policymaking across diverse countries including China, Great Britain, Iran, Mexico, Nigeria, the United States of America, and Russia. Careful comparison of political systems produces useful knowledge about the institutions and policies countries have employed to address problems, or, indeed, what they have done to make things worse. Students can compare the effectiveness of policy approaches to poverty or overpopulation by examining how different countries solve similar problems. Furthermore, by comparing the political institutions and practices of wealthy and poor countries, students can begin to understand the political consequences of differing levels of economic and political development. This AP course has College Board approval.

Hist/Lit/Art: Latin America (semester)

This course is part of a rotating series of interdisciplinary one-semester courses that can be taken for either History or English credit. Each course focuses on a particular region, nation-state, or group, with emphasis on its history, literature, and visual and performing arts. Past offerings have included "India and Pakistan," "Iran and Iraq," "Russia," "Nigeria," "China," "Indigenous US Literature," and "South Africa." This year's offering is "Latin America." Please see English 11/12 electives for course descriptions.

SCIENCE, TECHNOLOGY, & MATHEMATICS

The Science and Technology Intensive Path (STIP)

The Science and Technology Intensive Path (STIP) provides a program of study for students wishing to pursue more in-depth study of science, math, and computer sciences and reach a high level of mastery in these areas that will position them for advanced college-level work. Each STIP student works closely with a faculty mentor or the Academic Dean to develop and implement a rigorous and comprehensive course of study.

STIP students surpass the 94-unit minimum graduation requirement and complete the coursework in all disciplines necessary for admission to the University of California. STIP graduation requirements differ from the general requirements in five areas in that it requires:

- Four years of laboratory science, including: Biology, Chemistry, Physics, and one advanced-level elective (16 units)
- Four years of high school mathematics, including at least Pre-Calculus (16 units)
- A total of 8 additional elective units in science, math, or computer technology
- A reduction in the general elective requirement to only 4 units
- A senior project or internship (2 units)
- Attendance at a minimum of 3 community events related to the student's field of study

The school expects STIP students to take all core science courses at Kirby during the regular school year rather than comparable courses elsewhere.

STIP students must request permission from the Academic Dean to receive credit for science and technology related coursework and activities pursued off campus, including those taken at Cabrillo College, UCSC, or extended hands-on internships or mentor/apprentice arrangements with individuals or companies.

Science

In the 21st century, science continues to play a powerful role in guiding the world's decision-making and its progress toward sustainability. Under this paradigm, middle and high school science courses incorporate a focus on the health of the planet and on the individual.

The curriculum consists of a three-year introductory sequence in middle school, followed by a three-year lab sequence in high school. The program is both skills and content based, ensuring that all students completing the program understand the methodology of science and have a strong foundation in science. Curricula incorporate traditional content enhanced by contemporary research with each course emphasizing unifying concepts, inquiry-based approaches, and use of technology. All are based on National Science Education Standards. Students also master the skills necessary to obtain scientific literacy in the modern world and are encouraged to use their skills and knowledge to make contributions to the local, national, and global community. Upon completion of the program, students are able to explain natural processes using scientific evidence and knowledge, are proficient in writing both technical papers and those for a lay audience, and are adept at discussing scientific concepts relevant to current social and environmental issues.

Instruction in all science courses combines lectures with guided problem solving and hands-on lab work. Students spend approximately 25% of class time working on laboratory exercises while upper-level science courses provide additional opportunities for original research. Many courses require longer-term research projects culminating in a usable process or product, community service, research paper, or oral presentation.

Middle School Science

The middle school science program establishes the foundation for high school science courses by providing a comprehensive introduction to the subject.

STEAM

This yearlong course offers students in sixth grade the opportunity to develop a practice of tinkering and making, and moves toward the incorporation of computational thinking in tinkering environments during the second semester. STEAM blends both high and low tech tools with artistic expression. Students spend most of their time engaged in building, designing, collaborating, inventing, re-inventing, and using familiar materials in unfamiliar ways. Much of the content of this course is inspired by work of the Lifelong Kindergarten Lab at MIT, Carnegie Mellon's CREATE lab and the Exploratorium's Tinkering Studio. Some examples of explorations in STEAM include creating marble runs; building scribbling machines; working with circuits in a variety of contexts; designing and building cardboard automata; culminating in the application of students' knowledge of coding, electronics, 3D modeling, and physical prototyping.

Science 6/7: Life Science

This yearlong course is a complete introduction to life science with an inquiry-based approach to discovering the concepts of biology. The exploration of life through hands-on learning experiences, projects, activities, and field trips inspires a deeper appreciation for the content while developing a broad understanding of the many topics covered. The areas of focus are cellular biology, genetics and heredity, classification, organisms as they have evolved, and ecosystems. Some of the primary skill sets developed during this course are scientific reasoning, experimental design, scientific writing, modeling, and communicating science.

Science 8: Physical Science

The eighth grade science course is a lab-oriented introduction to physical science and robotics. Students expand on their ability to design and construct scientific investigations; gather, analyze, and interpret data; communicate scientific processes and explanations; construct models based on data; think critically, logically, and creatively; and establish the relationship between evidence and reasoning.

High School Science

The science curriculum has been carefully crafted to ensure that students have the prerequisite math skills as they advance. The traditional curriculum of freshman biology, sophomore chemistry, and junior physics is not rigid at Kirby; rather students are allowed to embark on the scientific path that aligns their interest and math ability to motivate and support student success.

All Kirby students are encouraged to study each of the following disciplines for one year: Biology, Chemistry, and Physics. Subject-specific exceptions can be made if advanced courses (AP or Honors) are substituted. Our course offerings make it possible to fulfill this three-year requirement in a variety of ways. The flow of courses can be individualized, but is dependent on math readiness. Students transferring from other high schools who have taken their courses in a different sequence may have to follow a modified path through the curriculum in order to fulfill the requirement of three years of laboratory science.

Biology

In this introductory biology course, students develop scientific inquiry and literacy skills through hands-on laboratory investigations, including hypothesis development, data collection and interpretation, and written and oral presentations. Topics include cellular structure and function, cellular reproduction, DNA structure and function, as well as evolution, ecological principles and humans and the environment. Laboratory activities accompany major topics. Emphasis is placed

on critical thinking, problem solving, and student collaboration on activities, labs, and research projects. Meets UC “d” or “g”requirements.

Chemistry (Prerequisite: Algebra 1; Recommended Co-requisite: Algebra 2)

In this introductory chemistry course, students enhance their knowledge in scientific methods through hypothesis testing, experimental design, data collection, data analysis, report writing, and oral presentations. Topics include atomic and molecular structure, mixtures, the periodic table and its trends, chemical bonds, conservation of matter and stoichiometry, gases and their properties, chemical reactions, solutions, and nomenclature. Laboratory activities accompany major topics. Class discussions and research projects encourage students to think critically about course material and develop connections between science and other disciplines. This course is typically taken in 10th grade, however 9th grade students may take it concurrently with Biology if they are also enrolled in Algebra 2 or higher. Meets UC “d” or “g” requirements.

Honors Advanced Chemistry (Prerequisite: Chemistry)

This is a one year course set up to be a more in-depth continuation to the Chemistry course taught at Kirby. It begins with a brief review of the fundamental concepts of atomic theory, bonding, types of reactions, and stoichiometry, and the behavior of gases. Students are exposed to more challenging concepts while continuing to develop their problem-solving and critical/analytical thinking skills. This course provides various classroom and laboratory experiences through activities, experiments, and demonstrations. The goal of this course is to allow students to venture into the understanding and appreciation of the world around them by challenging them to acquire knowledge of scientific laws that influence our everyday lives. This course emphasizes collaborative learning and science processing skills, which allows students to participate and engage in the hypotheses formulation, experiment design, and data collection/analysis. Students are expected to engage in independent study, group study, and whole-class learning. Meets UC “d” or “g” requirements.

Honors Environmental Science (Pre- or co-requisites: Algebra 2 and Chemistry)

This course provides students with scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, and to identify and analyze environmental problems that are natural or human-made. Through examination and analyses, students explore alternative solutions, resolution, or preventions of environmental hazards. Instruction includes lectures, discussion, demonstrations, labs, written work, and field trips. Topics include ecology and biodiversity, pollution, energy resources, climate change, food systems, environmental hazards and human health, sustainability, environmental worldviews, and ethics. Meets UC “d” or “g” requirements.

Physics (Prerequisite: Geometry)

This is a traditional college prep physics course focusing on Newtonian Mechanics, Kinematics, Energy, Rotational Motion, Oscillations, and Gravity with some investigation of additional topics. The course emphasizes problem solving, hands-on lab investigation, and the application of concepts and skills through projects. Students work within various real-world contexts to develop strong problem-solving skills in designing and conducting experiments that are at times heavily reliant upon quantitative analysis. A non-exhaustive list of topics to be covered more or less extensively in the course includes motion in one and two dimensions, forces and acceleration, work and energy, momentum, circular motion, gravitation, thermodynamics, waves, electrical forces and fields, current and circuits, magnetism, and atomic and subatomic theory. Meets UC “d” or “g” requirements.

Honors Physics (Pre- or Co-requisite: Pre-Calculus)

This is a rigorous introductory course in physics focusing on Newtonian mechanics, and Kinematics, Energy, Rotational Motion, Oscillations, and Gravity with some investigation of additional topics. The course content incorporates hands-on laboratory activities, in-class physical demonstrations, and practical applications of these principles are discussed. A problem solving approach emphasizing both conceptual understanding and basic mathematical modeling is used. This

course requires strong mathematical skills and serves as good preparation for the AP Physics class. Honors Physics meets UC “d” or “g” requirements.

Technology

Students must acquire computer proficiency in order to succeed in the 21st century. Each student is guaranteed access to a Chromebook if they do not use a device of their own. Students can use these for in-class research, paper writing, or online assessments. Our facilities are now equipped with a FabLab that includes a laser-cutting device and 3D printers, which students may use with proper training and teacher permission, and/or through the curriculum of some courses.

Introduction to Robotics (semester)

Intro to Robotic Engineering is an intro-level course for robotics and programming. It will develop students’ computational, manufacturing, and critical thinking skills while showing them how to create, rather than simply use, new technologies. Students will learn basic computing and manufacturing skills, with the emphasis being on robotics and robot programming. This semester utilizes the C++ programming language, computer-aided design (CAD) software, and the Arduino robotic control system. Objectives and goals include mastery of the following skills: programming, prototyping, design, engineering, and manufacturing. Students will learn about the mathematics and algorithms that make computers and robots work, and be asked to demonstrate critical thinking, creativity, and problem-solving skills in hands-on lab experiences.

Engineering & Design Thinking

This yearlong course offers students a project-based learning space to identify solutions to problems they see in the world. The first semester focuses on tinkering and making, building their knowledge of the various technologies that are relevant to this space. These projects encourage self-reflection, identity development, community building, and norm-setting for this new space. The second semester focuses on large-scale projects, based on student interest and connection to our immediate, local, and global communities, encouraging students to connect their problem-solving work to activism. Throughout the year, students spend their time engaged in problem-solving with innovative and out-of-the-box thinking, which includes working through the design process.

AP Computer Science Principles (Prerequisite: Algebra 1)

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts and contribute to a computing culture that is collaborative and ethical. This AP course has College Board approval and meets UC “d” or “g” requirements.

Yearbook (yearlong, 2 units)

The yearbook is designed for students interested in producing an annual containing memorable events of the school’s year. The course includes planning, thematic development and follow-through, page layout and design, copy and caption writing, photography and photo editing, and proofreading. Selling senior tribute ads and distribution are also part of the course. Production of the yearbook is carried out by the students from the beginning to a completed product that is sold to the student population. The book is built using a digital platform, fully on-line. During both semesters, students are responsible for producing completed layouts in order to meet publication deadlines.

Mathematics

Students enter the mathematics program based on level of mastery, as determined by their previous coursework, teacher recommendation and a placement test. Student grade level does not determine course level. Hence, math classes generally contain students from a range of grades.

The program is designed so that most students entering Kirby in middle school can complete AP Calculus BC before graduation. The mathematics program takes full advantage of our small class sizes, and instructors spend one-on-one time with students during regular problem-solving sessions.

The sequence of classes is taught through collaborative problem solving and to gain valuable skills in a variety of areas. The courses include a rich mix of application problems oriented toward solving real-life problems through mathematics.

The Algebra 1-Geometry-Algebra 2 sequence follows a traditional math sequence with examples from SAT examinations incorporated into the standard curriculum. Fundamentals are supplemented by work in exponential and logarithmic functions, matrices, sequences, series, and probability.

Students who take required core math courses outside of Kirby, due to scheduling conflicts or other acceptable reasons, must succeed on the Kirby placement test before proceeding to the next level.

Middle School Math

The middle school math program at Kirby is consistent with the California State standards for grades 6 through 8.

Mathematical Problem Solving

This course helps students develop a foundation of math skills strong enough to support the structure of knowledge they will continue to build in future courses. Along with honing study skills, the course aims to develop a firm understanding of: arithmetic functions; negative numbers; coordinate graphing; basic geometric terminology and calculations; fractions; decimals; ratios; percentages; unit conversions; problem-solving techniques; and a glimpse at some basic concepts of algebra. The content of this course is taught using hands-on instruction, problem solving, interactive individual and group activities and with a focus on understanding the application of the skills being developed in a real world context.

Pre-Algebra

Pre-Algebra builds upon students' knowledge of math fundamentals and integrates those concepts with algebraic expressions, graphing, geometry, measurement, probability, and statistics. Variables are used as abbreviations in formulas and as unknowns in problems, and they are used to generalize patterns and to represent data on the number line and the coordinate plane.

High School Math

Algebra 1

Algebra 1 consistently places major emphasis upon problem-solving. Major course concepts include solving single variable equations, linear functions, simplifying polynomial expressions, fractions, ratios, functions, systems of equations, rational and irrational numbers, and exponential equations. Expressions, equations, and functions are described graphically, symbolically, verbally and numerically. Meets UC "c" requirement.

Geometry (Prerequisite: Algebra 1)

This course is focused on transformations, proofs, problem solving, and spatial reasoning. In addition to reviewing basic geometric concepts, students are introduced to the ideas of geometric transformations, constructions and proof systems. This course also introduces right-triangle trigonometry. Students perform constructions using compass and straightedge,

paper folding, reflective devices, and computer software, and study a broad variety of geometric problems and puzzles. Students state and prove or refute conjectures; study and perform geometric transformations; eyeball and estimate measurements; and refine their mathematical communication skills. Meets UC "c" requirement.

Algebra 2 (Prerequisite: Geometry)

Algebra 2 is a yearlong course that builds upon the foundation established in Algebra 1 with the following core units of study: Functions (including variation, sequences, and inverses), Systems of Equations and Matrices, Parabolas, Quadratic Functions, Exponential & Logarithmic Functions, and (time permitting) a more basic investigation of Rational Functions, Trigonometric Functions, and Conic Sections. Projects and problem sets accompany a somewhat conventional route of study and assessment of these units. Students learn to use a graphing calculator for this course, which will also be utilized in subsequent mathematical coursework. Meets UC "c" requirement.

Financial Mathematics with Advanced Algebra Applications (Prerequisite: Algebra 2)

This is a yearlong course designed to foster strong algebraic thinking and problem solving to enable students to make informed decisions regarding matters of money and finance in their daily lives. Major topics include principles of finance economics, investment, amortization, supply and demand, revenue and profit functions, loans, compound interest and continuous interest, credit card debt, car ownership, and budgets. The course features the real-world applications and exploration of linear, exponential, piece-wise, quadratic, and step functions, in addition to measures of center and spread and graphical representations of data. The textbook is Financial Algebra by Gerver and Sgroi. Meets UC "c" or "g" requirements.

Number Theory (Prerequisite: Algebra 2) (2 unit, yearlong)

Number Theory is a supplementary elective math course designed to study arithmetic functions and integers generally. The course focuses less on computation and relies more heavily on proofs. Students in the class begin by reviewing formal proofs and practicing different types of proofs before moving into the number theory aspect of the course. The course is meant to provide a strong foundation in number theory concepts such as Divisibility, Primes Numbers, the Euclidean Algorithm, the Fundamental Theorem of Arithmetic with a heavy focus on Modular Arithmetic. Students will leave the class ready to approach more advanced topics such as basic Group Theory. Time permitting, other topics that may be broached include: Basic Python Programming, Diophantine Equations, Introductory Group Theory, Euler Phi Function, Cryptography, and mathematical operations in different bases.

Pre-Calculus (Prerequisite: Algebra 2)

The focus of this course is to build fluency with the elementary algebraic and transcendental functions (variation, polynomial, exponential, logarithmic, trigonometric) both graphically and algebraically. Students learn to transform and analyze each function with a focus on modeling and application. Sequences and Series are studied to develop student's numeric sense and in preparation for power series and Taylor series in Calculus. Triangle trigonometry is expanded from Geometry to include the unit circle, non-right triangles, and periodic functions. Students work to develop intuition about probability and counting rules, and are introduced to polar coordinates, vectors in two dimensions, and complex numbers. In the final part of the course, students receive an introduction to limits and calculus. This course is typically followed by AP Calculus BC or AP Statistics. Meets UC "c" or "g" requirements.

AP Calculus BC (Prerequisite: Pre-Calculus)

In the first semester of this yearlong course, students are exposed to the fundamental Calculus concepts of limits and derivatives. Furthermore, the class studies the applications of derivatives including, but not limited to, related rates and optimization. In the second semester, students expand the applications of integration to the study of differential equations and are introduced to the variety of techniques used to compute integrals (partial fractions expansions, trigonometric integrals with identities, trigonometric substitutions and by parts). Another area of study is transcendental functions, such as the exponential and logarithmic functions initiated in Algebra 2. Students learn how to differentiate and integrate the

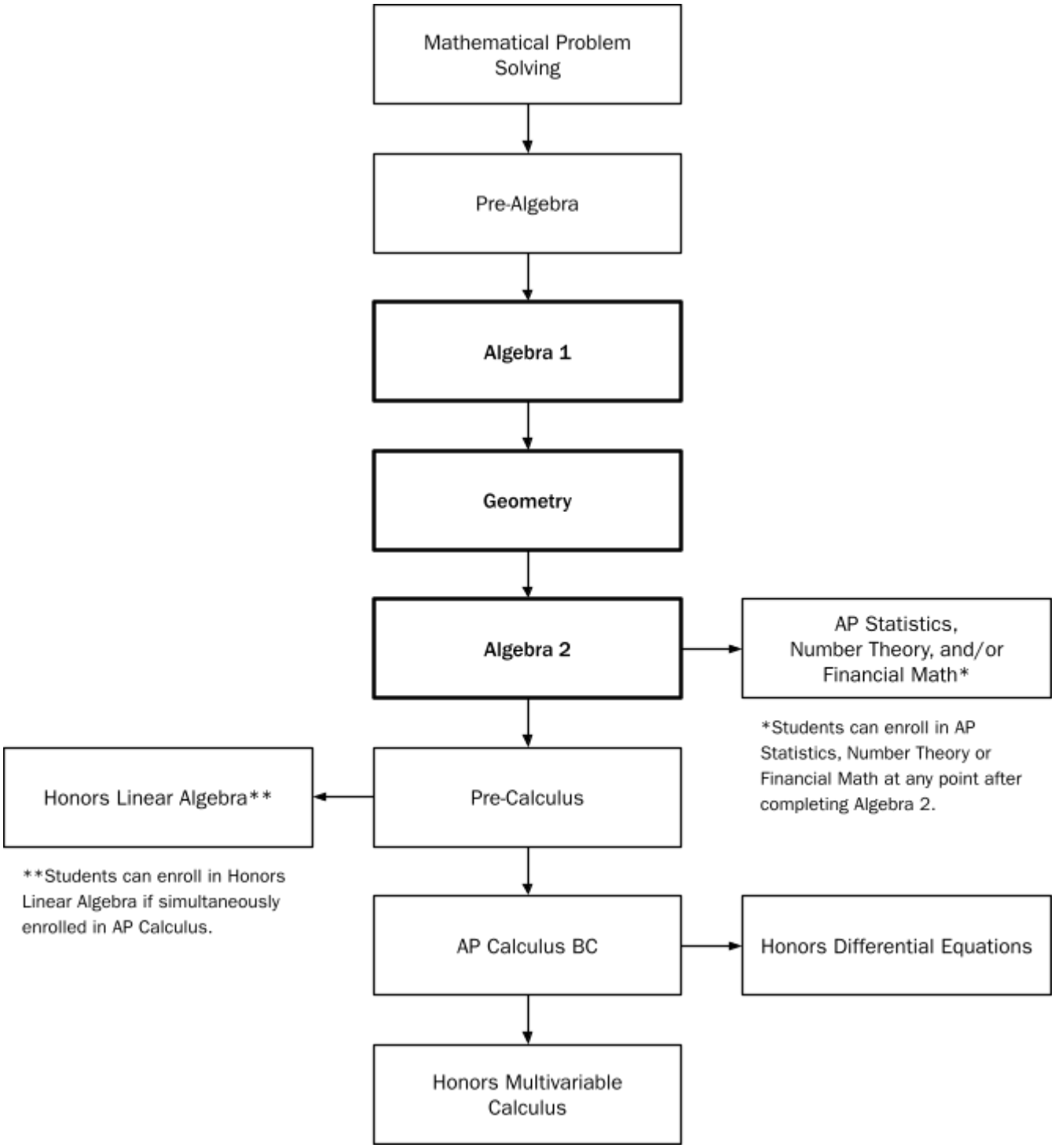
various functions. Infinite series of constant terms are also investigated to prepare them for power series, Taylor series, and polynomials. In the second semester students conclude the study of single variable calculus with the study of parametric equations (and their relationship to two- and three-dimensional motion), polar equations, and infinite series. Elementary vector calculus including addition, subtraction, and multiplication (dot products and cross products) is also studied. Advanced differential equations and their solutions are investigated as well. The course concludes with a review of Calculus B and C in preparation for the College Board AP exam in May. This AP course has College Board approval. Meets UC “c” or “g” requirements.

Honors Multivariable Calculus (Prerequisite: AP Calculus BC)

This yearlong course begins with vector operations and applications in three-dimensions. Similar ideas from AP Calculus are studied including slopes of 3-D surfaces, directional derivatives, and finding surface areas and volumes of irregular shapes. The class finishes with the “big three” theorems: Green’s, Stoke’s, Gauss’ Theorems. Meets UC “c” or “g” requirements.

Math Program Sequence

Kirby offers a comprehensive math sequence that includes middle school, high school, and college-level offerings. Courses in **bold** (Algebra 1, Geometry, and Algebra 2) are required for High School graduation. Please note, advanced offerings rotate and are not available every year.



WORLD LANGUAGE

It is vitally important to have the knowledge and experience necessary for the understanding of other cultures and worldviews in order to fully participate in multilingual and multicultural communities locally, regionally, and globally.

The Modern Language Program includes American Sign Language and Spanish. American Sign Language focuses on developing both receptive and expressive signing abilities, while Spanish uses communicative and integrative methods that develop listening, speaking, writing, and reading skills. All of our modern languages also emphasize cultural understanding as a part of language acquisition. Students acquire skills in employing the grammatical structures necessary to carry out the chosen communicative functions, learn a selected lexical content, and gain a cross-cultural perspective and insights into their own culture.

The Classic Language Program's goals differ because the study of Latin is strongly associated with its incidental benefits—the knowledge it gives one of English vocabulary and the structure of language in general. Its primary goal is to provide students with the knowledge that will allow them to read Latin literature. Its secondary goal is to move beyond the purely linguistic sphere to comment on questions of culture so that students gain an understanding of Roman history and institutions, which have shaped Western culture.

Students may begin language by taking Latin 1 in seventh grade. In eighth, students may choose to continue on to Latin 2 or start Latin 1 or Spanish 1. Students entering with a previous background in language study may request to be assessed to demonstrate their level of language mastery for placement in upper-level courses.

The Languages Intensive Path (LIP)

The Languages Intensive Path (LIP) offers high school students intensive study of world languages and cultures. LIP students are required to complete all general graduation requirements listed under the Graduation Requirements and use their elective options for focused language study. LIP students complete 18 units in languages, including at least one language through Level 4. The graduation requirements for LIP students include:

- Four years of high school level language study (16 units)
    - At least three years of study must be completed *during* high school
- A senior project or internship (2 units)
- Attendance at a minimum of 3 community events related to the student's field of study

Students completing this intensive path graduate well prepared for life in a multicultural and multinational world having developed both advanced linguistic abilities and a greater understanding of other cultures. As with all Intensive Paths, completion of the program is noted on the student's transcript.

Middle School Language Study

Seventh and Eighth Grade: World Language Study

Middle school students may begin world language study in seventh grade by taking Latin 1. Through the study of Latin, students develop a deeper understanding of the English language and how to think about language in general, which will prepare them for many world languages. Eighth graders may elect to begin studying Spanish 1 or to continue their study of Latin.

Language Course Offerings

Open to all 9th-12th grade students

American Sign Language

American Sign Language 1 (semester)

This semester-long course is designed for students who are brand new to American Sign Language (ASL). It is designed to develop two primary communicative language skills in ASL: "receptive" (the student's ability to understand the language when someone signs TO them) and "expressive" (the student actually signing the language). Students also learn about Deaf society in general and about features of Deaf culture that influence the use of the language in daily life. Students learn a variety of useful expressions that will help them to communicate smoothly with native speakers even with limited vocabulary and structures. Students develop expressive and receptive abilities through various activities using the vocabulary and grammatical structures that they have been learning. This is an accelerated course, covering a year's worth of content each semester. Meets UC "e" or "g" requirements.

American Sign Language 2 (Prerequisite: ASL 1 or equivalency) (semester)

This semester-long course is designed for students who have learned one semester of American Sign Language (ASL) at Kirby or in equivalent courses elsewhere. It is designed to develop two primary communicative language skills in ASL: "receptive" (the student's ability to understand the language when someone signs TO them) and "expressive" (the student actually signing the language). Students also learn about Deaf society in general and about features of Deaf culture that influence the use of the language in daily life. Students learn a variety of useful expressions that will help them to communicate smoothly with native speakers even with limited vocabulary and structures. Students develop expressive and receptive abilities through various activities using the vocabulary and grammatical structures that they have been learning. This is an accelerated course, covering a year's worth of content each semester. Meets UC "e" or "g" requirements.

American Sign Language 3 (Prerequisite: ASL 2 or equivalency) (semester)

This semester-long course is designed for students who have learned two semesters of American Sign Language (ASL) at Kirby or in equivalent courses elsewhere. It is designed to develop two primary communicative language skills in ASL: "receptive" (the student's ability to understand the language when someone signs TO them) and "expressive" (the student actually signing the language). Students also learn about Deaf society in general and about features of Deaf culture that influence the use of the language in daily life. Students learn a variety of useful expressions that will help them to communicate smoothly with native speakers even with limited vocabulary and structures. Students develop expressive and receptive abilities through various activities using the vocabulary and grammatical structures that they have been learning. This is an accelerated course, covering a year's worth of content each semester. Meets UC "e" or "g" requirements.

American Sign Language 4 (Prerequisite: ASL 3 or equivalency) (semester)

This semester-long course is designed for students who have learned three semesters of American Sign Language (ASL) at Kirby or in equivalent courses elsewhere. It is designed to develop two primary communicative language skills in ASL: "receptive" (the student's ability to understand the language when someone signs TO them) and "expressive" (the student actually signing the language). Students also learn about Deaf society in general and about features of Deaf culture that influence the use of the language in daily life. Students learn a variety of useful expressions that will help them to communicate smoothly with native speakers even with limited vocabulary and structures. Students develop expressive and receptive abilities through various activities using the vocabulary and grammatical structures that they have been learning. This is an accelerated course, covering a year's worth of content each semester. Meets UC "e" or "g" requirements.

Spanish

Spanish 1

Spanish 1, which is also open to eighth grade students, incorporates activities and exercises that focus on expanding students' ability to develop listening comprehension, to communicate orally and in writing, and to understand text through contextual reading. Grammatical concepts are learned and applied through these activities. Students are exposed to contemporary culture of the Spanish-speaking world and participate in activities that promote confidence as they speak. Student assessment is based upon a combination of written and oral quizzes, student presentations, projects, and class activities. Meets UC "e" or "g" requirements.

Spanish 2 (Prerequisite: Spanish 1 or equivalency)

Spanish 2 builds upon the grammar and vocabulary learned the previous year and further expands grammatical concepts. Contemporary culture of the Spanish-speaking world continues to be featured through music, films and authentic cuisine. An emphasis is placed upon speaking, listening, and reading comprehension activities. Students are expected to be active participants in order to gain the most from this class. Meets UC "e" or "g" requirements.

Spanish 3 (Prerequisite: Spanish 2 or equivalency)

In Spanish 3, students develop their linguistic ability to an intermediate level, enabling them to communicate more complex ideas and opinions. Students practice advanced oral comprehension as well as how to sustain conversation, problem solve, and apply grammatical concepts in dialogue. Instruction is entirely in Spanish and a strong emphasis is placed on reading in Spanish and correct pronunciation. An awareness of Spanish and Latin American cultures is enhanced with music, poetry, films, magazines, and newspapers. Meets UC "e" or "g" requirements.

Honors Spanish: Latin American Film and Culture (Prerequisite: Spanish 3 or equivalency)

This is a high-level second language course where students further their language studies via listening, speaking, reading, writing, and cultural studies. Students in this class explore five central themes throughout the course of the year and are required to participate actively in debates; analyze literature, art, and film; read, listen to, and understand online sources; write in-class essays, stories; and engage in other interpersonal communication with their peers. Spanish is spoken at all times. The class incorporates authentic resources such as Latin American films, TV series, Podcasts, music, short stories, and publications of current events. These resources connect directly to the theme of each unit and provide students an opportunity to engage in role-playing activities, discuss cultural themes, and engage in critical thinking. Supplemental literary, cultural, and film resources from the *Descubre 3* textbook are used throughout the course of the year. Review of additional vocabulary and grammatical concepts occurs as needed throughout the semester through the use of games and in class activities. This course can be taken as a student's fourth or fifth level Spanish language class. Meets UC "e" or "g" requirements.

Latin

Latin 1 (Available beginning in seventh grade)

This course is an introduction to the language and culture of the ancient Romans and is designed to prepare students to enjoy and succeed not only in further Latin study, but in many other languages and disciplines. Students communicate in and about a language that was used by the ancient Romans over 2000 years ago, but also develop a deeper understanding of the English language and how to think about language in general. Through the study of Latin, students explore the history, culture and mythology of the ancient Romans, and make connections to our own society, identities, and the stories we tell. Meets UC "e" or "g" requirements.

Latin 2 (Prerequisite: Latin 1)

This course builds upon the grammar and concepts studied in Latin 1. Students continue to learn about the history and culture of ancient Rome while grappling with increasingly more advanced grammatical forms and sentence constructions. In addition, students are gradually introduced to Latin poetry through short unadapted texts from Roman authors. Other highlights include units on Roman entertainment, food and dining, mythical heroes and monsters, and ancient inscriptions that give students a glimpse into the lives of working-class Romans. Emphasis continues to be placed on developing fluency in reading and writing, as well as on English vocabulary building and Latin's historical and cultural context. Meets UC "e" or "g" requirements.

Latin 3 (Prerequisite: Latin 2)

Latin 3 immerses students in unadapted Latin literature through the practice of literary translation and analysis, rooted in the close reading of several influential Roman texts. Students build on the concepts from Latin 1 and 2 with advanced topics in Latin grammar, while continuing to develop their skills for language study generally, and a greater understanding of the intricacies of English in particular. The primary objective of this course is to increase students' comfort and fluency with reading and discussing authentic Latin by exposing them to a variety of classical Latin authors and genres. Students learn oratory from Cicero, poetry from Catullus, and mythology (and poetry) from Ovid. Other writers—Caesar, Pliny and Martial—may be studied carefully as well. Students are introduced to a variety of specialized literary concepts and terms to be used in analyzing these primary texts. Class discussions, short written assignments, and creative projects encourage students to consider the cultural significance of the passages. Emphasis is placed upon reading the texts as historical and literary works. Meets UC "e" or "g" requirements.

Honors Advanced Latin Literature (Prerequisite: Latin 3)

This course involves the study of advanced original Latin texts that are not covered in Latin 3 and Honors Latin: Vergil's Aeneid, plus exploration of the role of Latin and Roman cultural products and ideas in our culture today. Expanded understanding of Latin's role outside of the Classical period and student-directed inquiry will be our focus in this course. Reading selections from outside the canon of typical classroom texts are prioritized, and students in this course have increased opportunities to exercise choice in the topics and content for their advanced Latin studies. This course can be taken as a student's fourth or fifth level Latin language class. Meets UC "e" or "g" requirements.

ARTS

Arts courses provide extensive opportunities for student involvement in visual arts, theater arts, dance, and music. We offer a specialized program for those who wish to pursue university and professional careers in the arts while maintaining the school's commitment to academic excellence.

The Arts Intensive Path (AIP)

The optional high school Arts Intensive Path (AIP) emphasizes the study of fine and/or performing arts. AIP students acquire the background, skills, and knowledge necessary for entering a college fine or performing arts program. Under the mentorship of a faculty mentor and the Academic Dean, students choose a general arts program of concentrated study in a specific discipline. The graduation requirements for AIP students are the following in addition to the normal breadth requirement for other subject areas:

- A total of 18 additional elective units in the arts
- A senior project or internship (2 units)
- Attendance at a minimum of 3 community events related to the student's field of study

Middle School Arts

Arts Rotations

The Middle School Arts Program consists of four disciplines: visual arts, theater arts, dance, and music. Although some years may vary due to enrollment, the goal of the sequence is to expose our students to the fullest variety of the arts over the course of their middle school years at Kirby. To allow for this, middle school students take two semester-long arts rotation courses each year, which differ by grade level. Each of these classes offers an introduction to the fundamentals of the subject, encourages exploration of the discipline, and provides a basis for self-expression in response to a context of artistic traditions.

Chorus Elective

The Chorus vocal ensemble is open to students in middle school. It requires no audition or prerequisite and is designed to introduce the beginning or intermediate singer to proper vocal and choral techniques. Previous knowledge of music theory is helpful but not required; basic music-reading skills are incorporated into the course as well as age-appropriate musicianship. The ensemble focuses on rehearsal techniques, concert etiquette, and responsibilities associated with membership in a performance group. The class studies choral repertoire of various cultures, genres, and periods of music history, ranging from medieval chant to twentieth-century pop music. The chorus performs at two concerts each year and at other school and community events.

String Methods Elective (yearlong, 2 units)

All students in grades 6 through 12 are invited to learn to play a stringed instrument (viola, violin, cello, bass). Students may borrow their instruments from Kirby's library or use their own. This class meets before school twice a week, and students are expected to practice on their own to develop their craft. See the high school music course descriptions for complete information.

Theater Productions

All students in grades 6 through 8 are invited to perform in an annual middle school play. For this play, a large-ensemble one-act play, full length play or a series of short plays will be performed and every effort will be made to include all students who would like to be a part of it. The rehearsal and performance process is four to six weeks long for the annual middle school play.

High School Visual Arts

Art 1: Foundation

Art 1 serves as the foundation and prerequisite for all Visual Arts electives. It consists of two and three dimensional art, with a focus on drawing, painting, and ceramics. Media may include pencil, charcoal, chalk and oil pastel, ink, acrylic, and others. Students explore how the formal elements and the principles of design contribute to the quality of expression in visual art. They learn to use a variety of drawing media and acrylic painting techniques while operating from both observational and imaginative bases. By exploring their own artistic voices in relation to the broader context of contemporary art and art history, students make connections between seeing and thinking, giving them insights into mass media and visual communication. Students become skilled at discussing and critiquing their own work and that of their peers in both oral and written form. Meets UC “f” requirement.

Art 2: Intermediate Two-Dimensional Art (Prerequisite: Art 1: Foundation)

Art 2 students use their foundation in Art 1 to further develop two and three dimensional art techniques and establish their artistic vision in drawing, painting, printmaking and sculpture. Young artists work with both two and three dimensional media and observe relevant European, non-western and contemporary art to develop visual literacy, strengthen their understanding of art history, and to expand personal subject matter and material choices. Students engage in various types of reflection, using their peers as resources, to promote studio exploration. Meets UC “f” or “g” requirements.

Art 3: Portfolio Preparation (Prerequisite: Art 2: Intermediate 2-D Art);
Art 4: Portfolio Preparation (Prerequisite: Art 3: Portfolio Preparation)

These courses are sequential stages in the development of increasingly complex and challenging media combinations and techniques. Through assignments and individual extensions of the ideas presented in the context of the course, students work toward a body of work that reflects both visual breadth and individual artistic passions. With broad and distinctive practices, student portfolios become a foundation for AP coursework, college application addendum enhancement, or art school admissions. Coursework at these levels in art allow students to explore their internal imaginative world with personal fulfillment, meaning, and expressive impact. Meets UC “f” or “g” requirements.

Book Arts 1, 2, and 3 (Prerequisite: Art 1)

Book Arts encompasses writing, mark making, printmaking, computer-generated texts, and book production. Students receive an overview of the history of the book, both occidental and Asian, with an emphasis on contemporary book art. While exploring rudimentary typography and hand typesetting, students learn to design and execute multiple book structures, including one- and two- signature hand-stitched books, concertinas, scrolls, and various unique book structures, such as paper-over-board case bindings. Students become adept at book illustration, create one-of-a-kind books, and develop competence in several methods of graphic reproduction, including monoprints and relief prints. During their coursework, students print on a Vandercook No. 4 hand press. Book Arts 1 meets UC “f” requirement and Book Arts 2 and 3 meet UC “f ” or “g” requirements. Course may be repeated for credit.

Digital Photography (semester) (Prerequisite: Art 1 or consent of the instructor);
Darkroom Photography (semester) (Prerequisite: Art 1 or consent of the instructor)

Digital and Film Photography can be taken together for a full year of photography or as individual semesters. Together they explore the artistic and technical fundamentals of both digital and analog, gelatin-silver photography. In Digital Photography, students learn about making an image within available light by adjusting shutter speed, aperture, and sensor/film sensitivity. Gaining experience in exposure and composition, as well as editing in Lightroom and Photoshop, students use personal or school cameras and respond to a variety of subjects, within a context of photo history and diverse contemporary photographic practices. In Darkroom Photography, working with a 35mm single lens reflex camera (SLR), students learn the theory and practice of exposing 35mm film, developing it, and printing enlargements in Kirby's darkroom. By refining prints beyond the initial proof stage and exploring experimental techniques and processes, students gain an eye for the art of black and white photography and the variables that they can manipulate to create desired effects. Throughout the year, the uses of photography for self-discovery as well as fine art are important considerations and distinctions for students to achieve photo literacy. Darkroom Photography culminates with a final portfolio of ten images of refined cohesive photographic enlargements, coherent in subject, style, and theme. The history of photography and field trips are also an important support to class content.

High School Performing Arts

Theater Arts

There are many pathways to the heart of good performance. Kirby emphasizes creativity, collaboration, and perseverance. Theater students are exposed to many different schools of acting and are encouraged to discover the strengths of each and to build on personal preferences. Courses also cover theater vocabulary, roles in the theater, movement, acting, the reading of plays, theater design and tech, and viewing theater performances. Students create projects throughout the year in groups just as they would encounter in the professional theater world.

Intro to Drama

This course teaches the fundamentals of performance and covers all the technical aspects of theater from acting to building a production. Students also develop the skills needed to portray a character with understanding and sensitivity, and these skills are deepened in both monologues and scene work. Improvisation skills are applied to character development, enhancing moment-to-moment flexibility in performance, and creating new work. Students participate in short film making and use of Adobe Premiere Pro in this class. Five to ten hours of outside of class work on the theater production each semester is required as part of this course. Meets UC “f” or “g” requirements.

Advanced Drama (Prerequisite: Intro to Drama or consent of instructor)

Advanced Drama students are able to craft their course of study at differentiated levels. This course supports each student’s unique interests in the field and supports students in applying some of the theoretical skills learned in Intro to Drama. Students gain hands-on experience in acting, directing, technical theater, playwriting and much more. Each year the course focuses on a special topic depending on student interest and needs. Students focus on collaboration and community building in this ensemble-based and highly engaged course. Students must contribute fifteen hours outside of class on the fall and spring production and contribute twenty hours to the middle school play. May be repeated for credit. Meets UC “f” or “g” requirements.

Theater Tech A (semester);
Theater Tech B (semester)

Theater Teach A and B can be taken together for a full year of Theater Tech or as individual semesters. In Theater Tech, students receive an introduction to and build to an intermediate level of technical theater skill. Students demonstrate

understanding of the following areas of study through projects in: lighting, audio, costuming, props, stage management, scenic design. Students also work in class on Kirby's stage productions, in addition to working 5-10 hours outside of class, depending on the needs of the production.

Theater Productions

Each year, high school students are welcome to audition for a play and a musical. Every effort is made to expose students to different genres of plays and musicals, and expand students' performance and technical skills and life perspectives. Based on hours committed and level of work, students are enrolled in one of the following courses: Play Performance I (approximately 30 hours of work, earns 1 unit), Play Performance II (approximately 60 hours of work, earns 2 units), Play Tech I (approximately 30 hours of work, earns 1 unit), or Play Tech II (approximately 60 hours of work, earns 2 units). Students are graded based off of the Kirby production rubric. Middle school students are welcome to inquire about auditioning or performing tech roles and are approved on a case-by-case basis.

Music

The goal of the Music Department is to encourage ensemble participation, enhance knowledge of music theory and history, and build musicianship through a wide variety of musical groups and theory courses. Emphasis is placed on accuracy of rhythm, pitch, dynamics, and technique to build confidence in performance skills. In addition to formal theory courses, the Music Department incorporates notation, pitch recognition, and tonal memory into the practice of each ensemble.

Students may choose to join a number of music groups, including chorus, concert choir, chamber choir, jazz choir, or an instrumental ensemble. They are given opportunities to participate in school or local musical and theatrical performances and in state and national musical competitions including CMEA (Central Music Education Association) choral festivals. Many students audition and are selected for the Regional, State, and Central Coast Section, as well as Regional, State, and National honor choirs, bands, and orchestras.

String Methods (yearlong, 2 units)

The String Methods course is designed for students who want to explore and advance their skills on a string instrument. Along with the fundamental skills of playing the instrument, students discuss the importance of proper maintenance of the instrument, receive instruction on proper posture, finger placement with fingerboard geography, scales using various bowing techniques, fundamental music theory, rhythm exercises, and gain sight-reading skills. Furthermore, students have the opportunity to learn and play with other students in a supportive and collaborative environment. If needed, students will receive a school-owned loaner instrument to use throughout the course. Ultimately, this course prepares the students to audition for Kirby's intermediate instrument ensemble.

Chamber Orchestra (Prerequisite: Audition) (yearlong, 2 units)

Chamber Orchestra is open to students in grades 8-12 and meets after school. The Orchestra studies a variety of instrumental repertoire from standard classical literature to film scores and rock/jazz music. Students are expected to have studied their instrument for at least two years and be at an intermediate level of playing. Taking private lessons concurrently with a teacher is also recommended since the class typically only meets two afternoons a week. The group performs its repertoire within the local and school communities. Meets UC "f" or "g" requirements when taken in grades 9-12.

Jazz Ensemble (Prerequisite: Audition) (yearlong, 2 units)

Jazz Ensemble is a process-oriented instrumental performance class that meets Mondays after school. Emphasis is on a demonstrable understanding of elements of the genre. It is open to students in grades 8-12 who audition and demonstrate an intermediate level of playing ability, equivalent to one year of private lessons. Instrumentation includes piano, bass, guitar, drums, woodwinds, and brass. Musical material ranges from 1930s swing and big band tunes to bebop, Latin jazz, blues, and contemporary jazz. Basic jazz theory and improvisation skills are introduced and emphasized. There are four or

five performances throughout the year at the school as well as at local public venues. Meets UC “f” or “g” requirements when taken in grades 9-12.

Introduction to Guitar (semester)

This semester-long class is designed for beginning guitar players who would like to fill in the gaps in their basic overall knowledge of the instrument. The course covers instrument knowledge, basic techniques, chords, strumming, basic improvisation, how to read chord charts, and basic concepts in music theory that can be used to read and write music. The goal of the class is to get students playing right away and to equip students with skills that can be carried over into Jazz Band if the student should choose to continue development on guitar in an ensemble setting. Music played in this class is drawn from an overview of many different styles, including classical, jazz, blues, latin, rock, and pop. Students need no prior experience playing the guitar to enroll.

Introduction to Piano (semester)

Introduction to Piano provides students with training in basic piano technique, musical notation, history, and culture. This semester-long course is designed to develop skills both individually and in small groups. Students in this course have the opportunity to explore repertoire from different cultures and historical periods as they learn the basics of note reading and performance technique. An understanding of the basic elements of music is developed through exercises in composing and arranging. Students also learn about influential musicians from the past and present who have contributed to the development of the instrument. Students need no prior experience playing the piano to enroll.

Chamber Choir (Prerequisite: Audition)

Chamber Choir is a yearlong course open to students in grades 9-12 who demonstrate an upper-intermediate level of vocal ability and basic knowledge of music theory. In years when Concert Choir is not offered, 8th grade students have the option to participate in this course by audition. Chamber Choir studies musical genres ranging from early Renaissance madrigals to jazz and other contemporary styles. Rehearsals prepare students for extensive performances including Kirby Concerts, CMEA choral festivals, and other school and community events. Students in this ensemble also audition for regional and state honor choirs, in which they are able to work with talented choral singers under the direction of professional conductors. Meets UC “f” requirement the first year taken and can meet “g” requirement when taken in subsequent years.

Jazz Choir (Prerequisite: Audition; Corequisite: Chamber Choir) (yearlong, 2 units)

Jazz Choir is open to students in grades 10-12 who demonstrate an upper-intermediate level of vocal ability and basic knowledge of music theory. The class meets during X period on Tuesdays and Thursdays. An audition is required and members must be enrolled in Chamber Choir as a corequisite. Jazz choir studies the vocal jazz genre and works, including close harmonies, improvisation, and extended vocal techniques. Rehearsals prepare students for extensive performances that include school concerts, vocal jazz festivals and clinics, and other school and community functions. Meets UC “f” or “g” requirements.

AP Music Theory (Prerequisite: Music Theory or entrance examination)

Offered in alternating years and open to grades 9-12, students master the following areas of musical study: music reading, writing, and terminology; interval and scale recognition and identification; chord recognition; species counterpoint; part writing; voice leading; advanced dictation and ear training; advanced keyboard; and musicianship skills. The course follows AP course standards and prepares students for the Advanced Placement exam in May. This AP course has College Board approval.

FITNESS, WELLNESS, & HUMAN DEVELOPMENT

The Kirby Fitness, Wellness, and Human Development Department offers a full spectrum approach to health education which focuses on developing lives of balance and resilience. Through our Fitness, Wellness and Human Development courses students gain knowledge of the human body and mind in a context of inquiring awareness - instilling a lifelong commitment to positive physical, mental and emotional development and engagement. Additionally, all department faculty work collaboratively with the counseling office to encourage social and emotional development of our students and promote programming that positively affects the wellbeing of the whole school community.

Mindfulness Program

Mindfulness Practice and its benefits have been an integral part of the Fitness, Wellness, and Human Development course offerings across the grade levels for several years. The practice has been proven to provide skills and strategies for students to master the ability to optimally focus their attention and activate the learning centers of the brain. When the emotional processing center of the brain (the amygdala) is on high alert as a result of anxiety, sadness, grief, or overwhelm, the hippocampus (the center for learning and memory) actually slows or even stops functioning just when it might be needed. Mindfulness trains the student through simple techniques of focused awareness to regulate the emotional center of their brain and help to develop a steady mind and body. This practice strengthens readiness for learning and growing healthy relationships with themselves and others, optimally supporting their academic success.

Middle School

Academic Skills

The focus for this course is to help develop the skills necessary for success in the classroom, particularly the core content areas. Self-advocacy and frequent communication with teachers are encouraged and reinforced throughout the school year along with basic daily and weekly organizational routines.

Social Emotional Learning and Physical Health (SELPH) 6, 7, and 8

The Middle School SELPH program is an integrated and developmentally-scaffolded introduction to a variety of fitness activities and wellness topics designed to inspire a life-long commitment to health and wellbeing. Character development is an integral part of life at Kirby. SEL instruction is based on the Second Step program. All SELPH learners strive to gain confidence, set goals, make better decisions, collaborate with others in work and play, navigate the world more effectively, and enjoy physical activity/exercise.

Fitness activities include traditional group sports and games as well as alternative activities such as yoga, hiking, dance, and more, all with the goal of instilling team-building skills, good sportsmanship, and personal resiliency. The Wellness components for middle school allow students to actively explore issues relating to identity development, friendship, internet safety, communication, exercise, posture, nutrition, body image, media literacy, time/stress management, gender, sexuality, environmental awareness, and safety. The curriculum engages students in critical thinking and problem-solving activities designed to improve their personal understanding of wellness while learning to communicate positive, healthy messages to others.

High School

Health & Wellness (semester)

This class integrates issues of personal and social health with strategies for achieving a life-long commitment to wellness. It is intended to offer students the opportunity to learn techniques for evaluating personal health risks and for making decisions about individual behaviors that impact health and wellbeing. The course includes practical experience in stress management, nutrition, and exercise. Through discussions, independent research, writing, journaling, and presentations, students engage in understanding the three aspects of the health triangle—physical, mental, and social health—and explore socially relevant trends and current public health issues.

High School Fitness Program

The graduation requirement for the High School Fitness Program is a total of four units. Students satisfy this requirement by enrolling in the Contract Fitness Program or in the High School Fitness elective.

High School Fitness (2 units per semester)

This semester-long course, offered twice a year, introduces students to fitness activities designed to inspire a firm foundation in and life-long commitment to health and well-being. All classes include one or more of the four components of physical fitness: cardiorespiratory conditioning, muscular strength, muscular endurance, and flexibility. This course focuses on strength training, circuit training, and functional fitness through activities such as yoga, hiking, movement, pilates, and recreational sports. All activities contribute to students developing confidence in maintaining optimal performance in the world by engaging in life-long fitness practice.

Contract Fitness Program (1 unit per semester)

The Contract Fitness Program requires participation in a fitness activity outside of school for a minimum of three hours per week throughout an entire semester. Students who wish to participate in the Contract Fitness Program may appeal to the Academic Dean at the beginning of each semester. Students can enroll in the Contract Fitness Program as long as there is proper documentation of the activity as well as designation of a specific coach or instructor. The student's fitness activity must include one or more of the four components of physical fitness: cardiorespiratory conditioning, muscular strength, muscular endurance, and flexibility. Multiple activities may be combined to fulfill the minimum weekly requirement. All school athletic teams and clubs can be used to fulfill the Contract Fitness requirement.

ATHLETICS

We encourage all students to stay active and involved by playing on one of our athletic teams. With a wide variety of sports to choose from, more than half of our students find their place on a Kirby team. Kirby athletes are dedicated and competitive, participating in the Santa Cruz County Private School Association (SCCPSA) in middle school and the Pacific Coast Athletic League (PCAL) division of the Central Coast Section (CCS) in high school. Beyond helping students to stay fit and healthy, team sports teach students important interpersonal skills like leadership, cooperation, and teamwork. Being involved in an after-school sport also supports the development of time management skills. On average, middle school teams meet 2-3 times per week to practice or compete, and high school teams meet 3-5 times per week. This moderate commitment helps students learn how to balance academic, athletic, and personal responsibilities.

Team and Individual Sports

Intramural/Club Sports

Intramural and club sports are formed each year depending upon student interest. They meet regularly with a coach or supervisor but do not officially compete. Anticipated intramural teams and clubs are:

- Middle School and High School Coed Ultimate Frisbee Club (fall)
- Middle School and High School Surf Club (winter)
- Middle School and High School Mountain Biking Club (spring)
- Middle School and High School Tennis Club (spring)

Middle School

Kirby's middle school athletes compete in the Santa Cruz County Private School Association.

FALL (SEP–OCT)	**WINTER (NOV–JAN)**	**LATE WINTER / EARLY SPRING (FEB–MAR)**	**LATE SPRING (APR–MAY)**
Girls' Basketball	Boys' Basketball	Girls' Volleyball	Boys' Volleyball
Cross Country		Coed Soccer	Track & Field
			Coed Ultimate Frisbee

High School

Kirby's high school athletes compete in the Pacific Coast Athletic League within the Central Coast Section of the California Interscholastic Federation.

FALL (AUG–NOV)	**WINTER (NOV–FEB)**	**SPRING (FEB–MAY)**
Girls' Volleyball*	Boys' Basketball*	Track & Field*
Cross Country*	Girls' Basketball*	Boys' Volleyball*
	Girls' Soccer*	Swimming*
		Girls' Beach Volleyball*
		Coed Ultimate Frisbee

** The CCS constitution and bylaws apply to high school CCS-sanctioned sports that are marked with an asterisk.*

SPECIAL PROGRAMS

Off-Campus Learning

Kirby recognizes that great learning happens outside the classroom. Our holistic approach to education includes opportunities for students to learn through experiences that help them shape their understanding of the world while integrating principles of classroom learning. These experiences include service learning projects, field trips, retreats, culturally immersive travel, speaker-series workshops, and more.

Grade-Level Retreats and Immersive Travel Opportunities

At the beginning of each year, all grade levels head out on a 3-5 day experience. For grades 6-9 these retreats occur at various outdoor settings throughout Central California. Grade 10 and 11 engage in experiential learning through culturally immersive travel, and grade 12 heads to the outdoors for backpacking, reflection, and team building.

Service Learning

There are a variety of forms that service learning can take at Kirby. Many opportunities come up in the regular curriculum (examples include taking water samples on behalf of the county, working at election polls, organizing school-wide clothing swaps, etc.) and students are encouraged to pursue capstone projects for their Intensive Paths or Independent Study courses in their own areas of interest. These experiences build leadership skills and provide deeper insight into social, economic, environmental, and other forces that shape our community. Service learning experiences broaden students' perspectives, encouraging informed and engaged citizenship. Faculty offer guidance and support for students' projects.

Field Trips

Throughout the academic year, Kirby faculty organize field trips to deepen understanding and provide hands-on experiences. Students have, in the past, visited Ano Nuevo State Park, the Santa Cruz County courthouse, the San Lorenzo River, several museums, and a professional production studio. Field trips are encouraged and generally supported.

Independent Study

Kirby maintains a commitment to tailor instruction to the needs and interests of individual students. A high school student may ask a teacher to supervise an independent study to explore a subject for credit. This must first be approved by the Academic Dean and then must meet the following parameters:

- Independent study provides a student learning opportunity not available in the curriculum.
- The independent study demonstrates academic rigor and involves a level of effort and outcomes equal to standard courses. It is taken on a graded basis and requires a faculty advisor.
- A written proposal is approved by the Academic Dean prior to the semester in which the study is to begin. The proposal requires the signatures of the student, the student's parents, the Department Chair, the Academic Dean, and the instructor.

The faculty advisor meets with the student at least once weekly and is responsible for submitting scheduled grade reports. The Academic Dean and the faculty advisor ensure that the terms of the independent study agreement have been met.

External Courses

Kirby supports students who desire to further challenge themselves. With that in mind, there are various enrichment possibilities available in our community. In each case, students must consult with and obtain permission from the Academic Dean to take off-campus courses for Kirby graduation credit.

Credit for Courses Taken at Other Schools

Students enrolled may earn Kirby graduation credit for a course taken at another school only if the course is academically comparable to courses offered at Kirby and if the institution offering the course is an accredited institution academically comparable to Kirby. Students who enroll in such courses elsewhere must maintain a minimum course load of four courses at Kirby.

Cabrillo Community College (summer and/or concurrent with Kirby classes)

Courses with meeting times scheduled in the late afternoon and/or early evening may coordinate with Kirby's class schedule.

University of California system

The entire UC system offers Summer Session courses, including intensive language programs. In addition, a number of campuses offer special summer session programs geared for high school students who have completed their junior year. A release form from Kirby is required.

Correspondence or Online Courses

Many institutions in the United States offer correspondence/online courses at both the high school and university level. Many of these courses are self-paced. Please note, students who take required core math courses outside of Kirby due to scheduling conflicts or other acceptable reasons must succeed on the Kirby placement test before proceeding on to the next level of math. Kirby may have recommendations for institutions offering online options - please consult with the Academic Dean for referrals.

ROTATING COURSE OFFERINGS

Kirby Course Offering Process

Kirby recognizes that students are much more enthusiastic and engaged in their learning when they have a role in determining the direction of their studies. For this purpose, Kirby offers students the opportunity to collectively choose elective course offerings from each department when planning for the following year. This results in a wide variety of course offerings from year to year. Past courses that may be offered again in future years are listed below.

In addition, as a small school, Kirby has several AP and Honors course offerings that must rotate in order to have full student enrollment. Those courses are also listed below. Students should meet regularly with the Academic Dean to plot a trajectory that includes the appropriate prerequisites to allow them to take the advanced courses they desire.

Honors and AP Rotating Courses

**Please note, the courses listed below are in addition to the courses offered this year.*

AP Physics (Prerequisite: Physics or Honors Physics, Pre- or Co-requisite: AP Calculus)

AP Physics C: Mechanics is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. This course requires strong mathematical skills. Calculus is a pre- or co-requisite. Rigorous lab work constitutes about 20% of class time, with reports to be done at home. This AP course has College Board approval and meets UC "d" or "g" requirements.

AP Statistics (Prerequisite: Algebra 2)

This yearlong course is a thorough and detailed introduction to elementary statistics. The goal is to successfully complete a statistics-based project, including understanding its results and implications, recognizing its shortcomings, and effectively communicating the findings to others. A key component of the course is the introduction to and mastery of appropriate terminology. The use of statistical tools (such as a graphing calculator and computer-based statistical software) is required. The topics covered include graphical and numerical descriptions of data sets, Normal distributions and z-scores, correlation and linear least squares regression, data transformation for regression analysis, experimental design, elementary probability, random variables (discrete and continuous), sampling distributions, confidence intervals, significance tests, Chi Square tests (goodness of fit, independence, and homogeneity), and inference for linear regression. This AP course has College Board approval. Meets UC "c" or "g" requirements.

AP US Government (yearlong)

This year-long survey provides an analytical/historical perspective on government and politics in the United States and includes both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. Students participate in a detailed examination of the institutions, groups, beliefs, and ideas that constitute contemporary U.S. political reality. Specific topics include the Constitution, political beliefs and behaviors, political parties, interest groups, and mass media. Official institutions including the Congress, presidency, bureaucracy, and courts are reviewed, as well as civil rights and civil liberties. Students prepare to take the AP U.S. Government and Politics exam. Students also practice civic engagement by participating in local elections and/or campaigns, meeting with local representatives and

bureaucrats, and devising a local policy with the assistance of an online civic engagement platform. This AP course has College Board approval and meets UC “a” or “g” requirements.

Honors Advanced Biology (Prerequisite: Chemistry)

Honors Advanced Biology is a yearlong laboratory-based course that focuses on developing scientific literacy, critical thinking, experimental design, statistical analysis and general lab skills using cellular and molecular biology as a platform. Specific topics covered include biochemistry, cellular metabolism, and molecular genetics as well as their application in the fields of medicine, evolution and ecology. Throughout the year students use biotechnology tools to develop technical skills and reinforce an understanding of the scientific methods used in the life sciences. There is a significant laboratory component to this course. Meets UC “d” or “g” requirements.

Honors Art History (yearlong)

Honors Art History covers prehistory to contemporary times. While covering the broad scope of art history, students have time to dive deep into a few topics. The organization of the course is chronological, and touches on themes which are relevant to students today. Students describe, interpret, and analyze works of art using various critical lenses; understand the concept of context and contextual analysis; identify common characteristics among varied artworks based on periods/styles and themes; convey knowledge of techniques, media, and process, and relate works of art to their proper cultural and historical origins. Interdepartmental; can be taken either for Art or History credit. Meets UC “g” requirement.

Honors Differential Equations (Prerequisite: AP Calculus BC)

This semester-length course in Differential Equations begins with a brief review of the separable differential equations studied in the previous level with an emphasis on applications. With an emphasis on real-world applications and projects, this course covers all types of differential equations including separable 1st order, linear 1st order, 2nd order (homogeneous and non-homogeneous), higher order, and solving 2nd order differential equations using series. Meets UC “c” or “g” requirements.

Honors Latin: Vergil's Aeneid (Prerequisite: Latin 3)

This course engages students in the study of Vergil’s *Aeneid*. The rigor of the course is similar to that of a college Latin reading course. Extended Latin passages are put into context by reading English translations of the entire epic along with scholarly articles to complement each unit. The emphasis of this course is as much literary as it is linguistic. In addition to honing translation skills, students explore the literary themes, stylistic devices and historical context of the text through discussions, analytical essays, and creative assignments. The Aeneid’s place in classical literary tradition is examined with respect to Homer as well as the literary and political climate of the first century CE under Augustus. Other themes considered include the character of the hero, the role of the gods in the epic, who belongs, and who is an outsider, the cost of war and empire, and whether this story is one of migration, invasion, or homecoming. By spending the year on a single text, students are immersed in developing an understanding of the author’s poetic style, an appreciation for the complexity of the characters and their motivations, and a deep attachment to this work of literature. This course can be taken as a student’s fourth or fifth level Latin language class. Meets UC “e” or “g” requirements.

Honors Linear Algebra (Co- or Pre- requisite: AP Calculus BC)

This semester-length course in Linear Algebra begins with a brief review of the structure of matrices, basic matrix operations, and more complex systems of linear equations, matrices, and determinants. This application/project-heavy course devotes a healthy amount of time on computational techniques. Students learn to find and perform algebraic operations with matrices; find determinants, eigenvalues, and eigenvectors; and use them in real-world applications. They also use matrices to rotate, reflect, and manipulate objects in 2D and 3D, to find equilibriums in the real-world using Markov chains, and use incidence matrices to analyze supply chains and game theory. Meets UC "c" or "g" requirements.

Honors Spanish: Advanced Conversation and Literature (Prerequisite: Spanish 3 or equivalency)

This is a high-level second language course that focuses on building speaking proficiency and interpretive analysis in Spanish. The class emphasizes dialogue, reading aloud, role playing, and creative writing activities. Cultural awareness and exposure to culturally relevant topics are built through the use of authentic resources and supplemental texts, short stories, articles, poems, and screenplays that relate directly to each unit. Students explore five central themes throughout the course of the year and are required to participate actively in debates; analyze and understand literature, art, and online sources; write in-class essays, and short stories; and engage in skits and interpersonal communication with their peers. This course can be taken as a student's fourth or fifth level Spanish language class. Meets UC "e" or "g" requirements.

Honors Studio Art (Prerequisite: Portfolio Preparation)

Honors Studio Art is a culminating, intensive visual arts course that utilizes an inquiry-based approach to art-making, much like the CollegeBoard AP program and contemporary art practices. Students create art driven by deep curiosity and expressive goals. Exploration, experimentation, and revision with materials and processes support their sustained investigation of ideas as they develop personal style and a college-level body of work. Students start the year with common or related avenues of exploration that distill into personal channels of inquiry. They can choose from an emphasis on drawing, 2D design, or 3D design to manifest their inquiry. Articulating their ideas through writing, discussions, and critiques; presenting and curating their work for a personal digital display; and a group show prepare students for professional standards. Meets UC "f" or "g" requirements.

Past Offerings That May Return

**These course offerings are subject to student interest and teacher availability.*

English 11/12 past course offerings vary greatly and will not be listed.

Ancient Greek (Prerequisite: Latin 3)

This course is offered on an irregular basis to students who have taken at least three years of Latin. The object is to cover the majority of the Attic Greek Grammar in one year. Students learn the Greek alphabet, and then turn to pronunciation and accentuation. Grammar and vocabulary are presented much as they are in Latin. Points of Latin and English usage are regularly compared and contrasted. Simplified excerpts from ancient authors offer insight into Greek literature. Translation into Greek is also emphasized. Other topics, considered in broad outline, include Greek's place among the Indo-European languages, Greek dialects, Greek meter (the basis of Latin meter), Greek history and culture, Greek and Latin roots, the key to English vocabulary-building, are daily features of the course. Meets UC "e" or "g" requirement.

Concert Choir (Prerequisite: Audition)

A yearlong, auditioned vocal ensemble for intermediate/advanced treble singers in grades 8-12, Concert Choir studies choral music specific to women's voices from traditional classical literature and world music to pop and jazz. Rehearsals prepare students for extensive performances including Kirby Concerts, CMEA choral festivals, and other school and

community events. The course also covers a variety of other aspects of choral musicianship to help students become well-rounded musicians and lifelong learners of music. Meets UC “f” or “g” requirements when taken in grades 9-12.

Dance Company (Prerequisite: Audition or Interview with Artistic Directors) (yearlong, 2 units)

The goal of Dance Company is to develop the physical, intellectual, and creative skills of students interested in a deeper experience of dance as a performing art. Students taking this course may be interested in pursuing a career in dance and/or in preparing for a dance education at the university level. While maintaining professional-level rigor, the class fosters a nurturing, creative, and process-oriented approach to dance. Emphasis is placed on establishing technical and choreographic proficiency while developing artistry and establishing perspective on the responsibilities of an artist within the local and global community. The Dance Company Program introduces young dancers to the joys and requirements of being a member of a pre-professional-level dance company. Kirby Dance Company is an outreach arts program that engages and enriches the greater Kirby and Santa Cruz community. The course builds to final performances in Winter at Kirby and in Spring at a local theater. These productions include some rehearsal preparations outside of regular class periods. This is a mixed level course that often splits into smaller sections by technique level during class time. Placement is determined by audition or interview.

Digital Music Production: Recording (semester)

Students in this class learn recording techniques through hands-on experience recording both live sound and MIDI input. Students have the opportunity to learn about microphone techniques covering a variety of instruments and studio settings as well as gaining practice in recording sampled and MIDI music into digital audio workstations. Using these techniques, students are able to record original music of their own and from around the Kirby community. Alongside practicing these technical skills, students also explore some of the cultural significance behind historically popular music recordings and historical recording technology breakthroughs.

Digital Music Production: Mixing (semester)

Students have an opportunity to learn about and have hands-on practice using digital audio workstations to create and mix original music, MIDI music and music to video content. Students learn how to use effects, samples and MIDI to alter sounds in a musical way in a variety of DAW’s. Along with practicing these technological skills, students also develop listening skills while exploring some of the cultural significance of historically popular music recordings and the mixing techniques artists and sound engineers have used to achieve such sounds.

Human Biology (Prerequisite: Chemistry or teacher consent) (semester)

This course delves into the workings of the human body at the cellular, tissue, organ, and organism levels of complexity. Each body system is covered with an emphasis on basic anatomical structure and physiology of key metabolic functions. Labs may include microscopy of various tissue types and dissections of important mammalian structures (e.g. heart, lung, brain, etc.). Meets UC "d" or "g" requirements.

Marine Biology (Prerequisite: Chemistry or teacher consent) (semester)

In this course, students explore the organisms and ecosystems of the marine environment with an emphasis on Monterey Bay. Topics of study include the physical and chemical nature of the marine environment, biology and ecology of marine organisms, marine ecosystem diversity and function, and marine resources and human impacts. Field trips provide an opportunity to experience marine organisms in their natural habitat and perform scientific investigations outdoors. Meets UC “d” or “g” requirements.

Music Theory

This 9th-12th performing arts elective encompasses a wide variety of musical study with an emphasis on the following: music theory and fundamentals, formal analysis, keyboard and musicianship skills, ear training and sight singing, basic

melodic and rhythmic composition, and cultural and historical studies. The ultimate goal of this class is to develop a student's ability to recognize and describe the basic processes and materials of music. Meets UC "f" or "g" requirements.

Instrument Studies

This 9th-12th grade performing arts elective provides students with a one-on-one learning environment to study instruments with a more in-depth intention. Students who are beginning players on rhythm section instruments such as guitar, piano, bass, and drums have the opportunity to develop basic playing skills and gain historical/cultural background on these instruments in the styles of jazz, pop, funk, and rock. In addition, it is the overall intention that this course provides basic skills and theory needed to participate in Jazz Ensemble if the student wishes to do so. May be repeated for credit. Meets UC "f" or "g" requirements.

Intro to Programming (Prerequisite: Algebra 1)

This course teaches how to build expressions and functions that solve problems. Projects involve writing code to produce graphics and games, and the class is structured to maximize the time students spend writing programs (sometimes independently, and often with a partner) while learning how to go strategically from a problem statement to tested, reliable code.

Introduction to Dance

The aim of this yearlong course is to introduce students to the physical, cultural, and creative world of dance. Gaining movement skills and finding confidence and enjoyment through movement are central to this class. While the primary dance language is contemporary modern dance, students also become acquainted with a range of different movement styles and dance forms that may include: ballet, improvisation, site-specific dance, hip hop, musical theater, folk dance, and various other forms of dance from other countries and cultures. Throughout the course, dancers are also regularly engaged in the thoughtful creation and development of several of their own dances. Introduction to Dance students perform in the Winter and Spring Dance Concerts. Meets UC "f" or "g" requirements.

Introduction to Quantum Computation (Prerequisite: Algebra 2)

Kirby School partners with Qubit by Qubit to provide this cutting-edge course designed to introduce high school students to the exciting world of quantum computing. Quantum is the next frontier of computing technology, and will impact fields such as healthcare, finance, and cybersecurity. In this course, high school students learn concepts that many students do not hear about until well into their undergraduate or graduate education. Students in the course receive an introduction to linear algebra and probability and learn the basics of coding in Python. Additionally, they spend time exploring the "weird" physics properties of quantum mechanics that make quantum computers so powerful. By the end of this course, students are able to code quantum gates and circuits, implement quantum algorithms, and even run code on a real quantum computer. Students do not need a background in quantum computing or computer science to take this course.

Macroeconomics (semester)

This semester-long course examines selected topics in Macroeconomics, the study of the economy of a country. The course is designed to help students understand and interpret current economic events, and one requirement of the course is for students to scan current economic news stories and submit a brief commentary on them. The topics that are covered in the course are: a historical and political perspective on why some nations are wealthy and some nations are poor; the sources of the business cycle of economic upturns and downturns; unemployment, inflation, and the stock market; and the causes and solutions proposed for several economic downturns. Meets UC "g" requirement.

Photo: Portfolio Preparation (Prerequisite: Photography 1)

Incorporating the artistic and technical experience acquired in Photography 1, students embark on a course of study that incorporates broad exposure to the next level of photographic concepts and techniques while following personal interests.

Students refine their understanding of professional and standard practices, research historic and diverse contemporary photographers, and explore experimental techniques, ultimately producing a strong portfolio of work that reflects both required techniques and personal direction. Again, the emphasis in the Fall is on digital techniques and Film in the Spring. Field trips are an important support to class content. Large format photography and alternative processes are an option for the motivated student.

Psychology (semester)

This semester-long course explores some popular topics of psychology through the biopsychosocial perspective. The biopsychosocial perspective, as compared to the other psychology paradigms, is a holistic approach to understanding an individual's behavior that attributes it to multiple causes rather than just one. This perspective allows for the fact that the interactions of our body, mind, and our environment all affect each other in different ways. Utilizing this mindset, this course examines topics such as memory, perception, bias, social norms, mindfulness,and psychopathology. Themes included in this course are positive psychology, personality psychology, social psychology, neuropsychology, and abnormal psychology. Meets UC "g" requirement.

HIGH SCHOOL GRADUATION PLANNER

	9th Grade		10th Grade		11th Grade		12th Grade		Graduation Progress	
	Courses	Units	Courses	Units	Courses	Units	Courses	Units	Total Units	Required Units
ENGLISH										16
HISTORY										12
MATH										12
SCIENCE										12
WORLD LANGUAGE										8
VISUAL ARTS										4
PERFORMING ARTS										4
FITNESS										4
HEALTH										2
ELECTIVES										20
										94

NOTE: Students may take a maximum of 7 core courses per semester. Refer to the Course List for courses that may be taken as an 8th class.