

KIRBY SCHOOL GRADES 6 THROUGH 12

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CURRICULUM CATALOG **2021-2022**

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CURRICULUM CATALOG

OVERVIEW

MISSION STATEMENT

Through intellectual challenge in a responsive environment, Kirby empowers students to shape their futures with confidence. Our students learn to think critically, develop their creativity, and engage diverse communities with thoughtfulness and respect.

CORE VALUES

We believe:

- Offering academic challenge across the disciplines at all age levels maximizes the growth of each Kirby student
- Kirby's inspiring faculty cultivate and model lifelong curiosity
- Our commitment to small class sizes enables us to be responsive to every learner
- Student confidence is supported by our close-knit culture of kindness and mutual respect
- Young people who have an active voice in their own education and community will be motivated and enthusiastic learners
- When adolescents are taught and encouraged to lead healthy, balanced lives, their learning capacity and happiness increase
- Development of creativity and adaptability are crucial to a growth mindset and enhanced through exploration of a wide variety of arts, electives, and experiences
- Collaboration among parents, faculty, and students is fundamental to student success
- Culturally responsive education is a conscious, ever-deepening process of recognizing, exploring, and embracing our differences

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 Independent Practice Time (IPT) 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 special desire to sing in a high school-level ensemble may audition for Concert Choir.

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. Assignments for Independent Practice Time (IPT) averages 2 to 3.5 hours per nights 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. 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 Graduation Requirements is provided on page page 7. Please note that following more than one Path is not recommended; exceptions are rarely given. For all Intensive Paths, 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 the academic counselor, HIP students plan an interdisciplinary course of study and identify a focus that leads to a senior project.

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) offers high school students intensive study of world languages and cultures. Students completing this intensive path graduate exceptionally prepared for life in a multicultural and multinational world, having developed both advanced linguistic abilities and a greater understanding of other cultures.

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. Under the mentorship of a faculty advisor, students choose a general arts program or concentrated study in a specific discipline along with a senior project.

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 such example of this could be a specific focus on cultural expression, which could easily span the arts, languages, history, English, and Psychology. Most customized intensive paths will also require students to engage in a hierarchy of essential questions leading to culmination in a senior project. Students desiring to develop their own customized intensive paths are encouraged to 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. 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.

UNITS¹

	General Path	HIP Path	STIP Path	LIP Path	AIP Path	NOTES
ENGLISH	16	16	16	16	16	
HISTORY	12	16	12	12	12	
MATHEMATICS	12	12	16 ²	12	12	Completion through or beyond Algebra 2, if needed, to fulfill 3 years
LABORATORY SCIENCE	12	12	16	12	12	Must include Biology
LANGUAGES	8	8	8	24 ³	8	All in one language, except for LIP students
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 ⁴
HEALTH	4	4	4	4	4	Semester A during 9th or 10th grade, and the other Semester B during 11th or 12th grade. *Requirement is 2.0 credits for classes of 2022 and 2023.
ELECTIVES ⁵	18	10	4	6	2	*Requirement is 2.0 additional credits for classes of 2022 and 2023.
ELECTIVES WITHIN INTENSIVE PATH		6	8		18	
SENIOR PROJECT		2 ⁶	2 ⁶		2 ⁶	
TOTAL	94	98	98	98	98	

- Typically, yearlong courses earn 4 units and semester courses earn 2 units. However, some yearlong music and dance courses meet only two days a week and, therefore, earn only 2 units.
- Must include Pre-Calculus. Any math completed beyond Pre-calculus can be counted toward STIP electives.
- LIP students must complete six years of high school language with one language through Level 4 AP. High school level language taken in Middle School is credited.
- Students must engage in 3 hours per week of approved activity for one unit of contract fitness credit.
- Any course in any discipline that is above and beyond the graduation requirement may fulfill the elective requirement.
- 2 units are equal to 60 hours of student academic work.

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	GEOGRAPHY	HISTORY 7: ANCIENT CIVILIZATIONS	HISTORY 8: U.S.	3 YEARS, TAKEN GRADES 9-12	HISTORY 9: WORLD HISTORY	HISTORY 10: MODERN WORLD (HONORS OPTION)	HISTORY 11: U.S. (HONORS OPTION)	HISTORY 12: CHOICE ²
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 SCIENCE	SCIENCE 7: 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 , ASL 1, OR SPANISH 1	2 YEARS OF THE SAME LANGUAGE, TAKEN GRADES 9-12	WORLD LANGUAGE	WORLD LANGUAGE	ELECTIVE ³	ELECTIVE ³
ARTS	PERFORMING ARTS, VISUAL ART	VISUAL ART, MUSIC APPRECIATION	DANCE, DRAMA	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 ⁴	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 / CONTRACT FITNESS ⁴	SPORTS / CONTRACT FITNESS ⁴	HEALTH / 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:

- 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.
- "Choice" indicates that a class in that subject area is required, but students may choose from the electives offered within that discipline.
- "Elective" means the student must take a class, but may choose from any "non-required" course in any subject area, providing overall graduation requirements are met.
- SELPH is required in middle school. Two semesters of Health are required in high school, level A in 9th or 10th grade, and level B in 11th or 12th grade. High school students are required to complete 4 units of fitness and may participate in after-school sports or "Contract Fitness" to meet this requirement.

MIDDLE & HIGH SCHOOL COURSE LIST 2021-2022

English

English 6
English 7
English 8
English 9
English 10

English 11-12 choices:

AP English Multicultural Literature and Composition
Applied Ethics (s)
Creative Writing (s)
Graphic Novels (s)
History, Literature & Art: Indigenous US Literature [H] (s)
History, Literature & Art: South Africa [H] (s)
Personal Narratives (s)
Queer Voices in Literature (s)

History

History 6: Geography
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 U.S. Government
Macroeconomics (s)

Science

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

Grade 10-12 choices:

Chemistry or Forensic Chemistry (10th*)
Human Biology (s)
Marine Biology (s)
Honors Environmental Science
Honors Advanced Biology
Honors Physics (11th*)
AP Physics

Computer Science (9-12)

Intro to Programming
Introduction to Quantum Computation

Multimedia Electives (9-12)

Music Technology: Recording (s) [A]
Music Technology: Mixing (s) [A]
Yearbook ^

Mathematics

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

Grade 6-12 choices (H.S. Credit):

Algebra 1
Geometry
Algebra 2
Pre-Calculus
Financial Mathematics with Advanced Algebra Applications
AP Statistics
AP Calculus AB
AP Calculus BC
Honors Multivariable Calculus

World Languages

Grade 7: Latin 1
Grade 8 choices (H.S. Credit):
Spanish 1
Latin 1, 2

Grade 9-12 choices:

American Sign Language 1, 2, 3, and 4
Spanish 1, 2, 3, 4
Honors Spanish 5
Latin 1, 2, and 3
Honors Latin: Special Topics

Middle School Arts Rotation (6-8)

Grade 6: Drama (s)
Grade 6: Performing Arts (s)
Grade 7: Music Appreciation (s)
Grade 7: Visual Art (s)
Grade 8: Dance (s)
Grade 8: Drama (s)

Visual Arts (9-12)

Art 1: Foundation ◇
Art 2: Intermediate 2-D Art
Photography 1
Photo: Portfolio Preparation

Theater Arts (9-12)

Drama 1: Fundamentals
Drama 2

Dance (9-12)

Dance Company ^

Music

Chorus^ (open to grades 6-7)
String Methods^ (open to grades 6-7)
Orchestra (by audition) ^
Jazz Ensemble (by audition) ^
Grade 9-12 choices:
Chamber Choir (by audition)
Jazz Choir (by audition) ^
AP Music Theory

Fitness, Wellness & Human Dev.

Grade 6-8 Social Emotional Learning and Physical Health:

SELPH 6, SELPH 7, SELPH 8

Grade 9-12 choices:

Health & Wellness A (9th & 10th) (s)
Health & Wellness (11th & 12th) (s)
High School Fitness (s)
Contract Fitness
Psychology (s)

Special Programs

Drama Productions
International Student English Program
Student Council / Government Cabinet ^
Teaching Assistantship
Independent Study
Internship
Guided Research
External Courses

List of Honors & AP Courses

AP Calculus AB
AP Calculus BC
AP English Literature and Composition
AP Music Theory
AP Physics
AP Statistics
AP U.S. Government
Honors Advanced Biology
Honors Environmental Science
Honors History 10
Honors Latin: Special Topics
Honors Multivariable Calculus
Honors Physics
Honors Spanish 5
Honors U.S. History Practicum

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, 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:

- Four years of history (16 units)
- Four years of English (16 units)
- Six additional elective units in either English or history
- A Senior Project (2 units).

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. The variety of 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 on page 9.

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, 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*, *The Hate U Give*, and *The House on Mango Street*. 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 less familiar 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; socioeconomic status and U.S. national identity; and perspectives on the Vietnam War. 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, Anthony Doerr, Charlotte Perkins Gilman, Ralph Ellison, Raymond Carver, and Chimamanda Ngozi Adichie; and several major texts: *Death of a Salesman*, *A Raisin in the Sun*, *Woman Hollering Creek*, and *Kindred*. 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 and Composition (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." The study of major works addresses both literary criticism and the historical and social conditions out of which literary works emerge. 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 conceiving, planning, and 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 from the colonial period through the mid-nineteenth century, in addition to the following full-length works: *The Tempest*; *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 *Beloved*. 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.

Applied Ethics

What rules should driverless cars obey? Ought others' opinions influence how we dress? May we allow one person to die—or even actively kill them—to save many? "All is fair in love and war"—really? These are all questions of applied ethics—the study of what we ought to do in various situations. We'll learn a number of basic philosophical frameworks from which to approach such questions and how to effectively argue for the best course of action. Students will leave well prepared to compete against other schools in the (optional) High School Ethics Bowl. Meets UC "b" or "g" requirements as English 11/12 on the transcript.

Creative Writing

Using model texts for a variety of writing assignments in three genres (realistic fiction, poetry, and speculative fiction) 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 as English 11/12 on transcript.

Graphic Novels

Because of the common misconception that comics deal only in superheroes and juvenile jokes, graphic stories have been dismissed as unworthy of academia for decades; this dismissal has allowed some strange and wonderful literary art to flourish on the fringe. In this class, students explore nonfiction readings on the history and structure of comics while analyzing the words and images in graphic works (novels, trade paperback collections, and single issues). Students interested in this course should be prepared to read and annotate words and images for each class. Students also create and present original comics, complete independent research, and explore varying aspects of the comics industry. All levels of artistic skill are welcome—this course is first and foremost a literature elective with an emphasis on developing writing, reading, and presentation skills. Meets UC "b" or "g" requirements as English 11/12 on transcript.

History, Literature, and Art: Indigenous US Literature

This course on Indigenous U.S. literature, history, and art attempts to address a number of misconceptions and gaps in popular knowledge about Indigenous people and culture in the United States by focusing on a selection of historical moments and cultural productions. Course materials center as much as possible on the voices of Indigenous historical figures and writers from the seventeenth century to the contemporary moment. Some topics and historical periods the course addresses include: colonization of Indigenous California by Spanish, Mexican, and Anglo-American settlers; Indigenous resistance to settler-colonists; Indian boarding schools; legal and cultural sovereignty of Indigenous communities; and urban Indigenous experience in the context of pan-Indigenous identity. Course texts include *The Round House* (2012) by Louise Erdrich and *There There* (2018) by Tommy Orange. Meets UC "b" or "g" requirements as English 11/12 on transcript.

History, Literature, and Art: South Africa

This course seeks to give students an overview and understanding of the history, literature, and culture of South Africa. South Africa provides particularly arresting examples of European Colonization, legalized segregation and exploitation, and black resistance and survival. Themes covered in the course include an exploration of pre-colonial African Kingdoms, through European invasion and colonization, Afrikaner nationalism and the apartheid state, and the ANC and Black Consciousness Movement, culminating in an examination of the issues affecting current-day South Africa. Possible texts include *To My Children's Children*, by Sindiwe Magona, *I Write What I Like*, by Steve Biko, *Long Walk to Freedom*, by Nelson Mandela, and *The Heart of Redness*, by Zakes Mda. Meets UC "b" or "g" requirements as English 11/12 on the transcript.

Personal Narratives

Students in Personal Narratives explore a range of approaches towards creating work inspired by, based upon, or interfacing with material sourced from their autobiographies. Over the semester, students sample various

improvisation/devising approaches and personal writing techniques, and consider the challenges, ethics, and obligations of personal writing and its relationship with the necessary 'other'. Whilst there is some straightforward confessional writing, students also have ample opportunities to circumnavigate documentary-style writing and investigate performative and fictionalised modes of presenting their stories. Be prepared to dig up your old, forgotten diaries, awkward middle school poetry, and embarrassing home movies. It's going to get personal. Meets UC "b" or "g" requirements as English 11/12 on transcript.

Queer Voices in Literature

In this course, students read, discuss, research, write about, and present on queer (LGBTQIA+) voices in literature. Texts include Tillie Walden's graphic novel *On a Sunbeam*, Alok Vaid-Menon's treatise *Beyond the Gender Binary*, Akwaeke Emezi's novel *Pet*, and essays by James Baldwin and Roxane Gay. Students in this course also work with shorter texts, including songs and short comics by queer creators. Students should expect to read, write, and engage in literary discussions during every class meeting. Meets UC "b" or "g" requirements as English 11/12 on transcript.

INTERNATIONAL STUDENT ENGLISH PROGRAM

Currently our English offerings for international students consist of two courses that interconnect reading, writing, speaking, and listening skills: International English (Level 1) and College Writing (Level 2). Most international students take International English upon matriculating at Kirby. After successfully completing International English, most move on to College Writing. Some students may take College Writing more than once. Readiness to move into English 10/11/12 is determined by the instructor of College Writing in consultation with the English Department Head, the Academic Dean, and the Dean of International Students.

International Student English (yearlong)

International students develop the reading, writing, listening, speaking and grammar skills they need to thrive academically and socially at Kirby and beyond. Students read, discuss, and write about a range of authentic texts, which may include short stories, novels, biographies, textbook excerpts, scholarly journal articles, and poetry. They develop their own unique writing process and learn essential academic writing skills like appropriate grammar and punctuation use, paraphrasing, summarizing, writing essays and short responses, and documenting sources. The oral communication component of the course delves into group discussions and projects, formal presentations, and other on-campus communication skills. Strategies for academic reading and vocabulary building, efficient dictionary use, critical thinking, active listening, and time management are fully integrated into the course. Meets UC "b" or "g" requirements as English 9/10/11/12 on transcript.

College Writing Skills (yearlong)

This writing course prepares students for success in upper-level high school and college classes. Assignments focus on description, narration, argumentation, and classification. Together students build skills in gathering, analyzing, synthesizing, summarizing, paraphrasing and evaluating information. Strategies for building academic vocabulary, writing short responses and taking timed in-class essays are also covered. Students in this class work towards developing a unique writing process, style and voice, while continuing to build skills in grammar, punctuation, and spelling. Meets UC "b" or "g" requirements as English 10/11/12 on transcript.

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.

In sixth grade, students study world geography, both physical and human. 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.

Geography 6

This course creatively challenges students to use the tools of geography plus broadly applicable academic skills to view, analyze, and understand the world around them. The mapping labs and case-study approach of the textbook leads students into becoming geographic thinkers and provides a solid framework for the additional readings, class activities, and projects that the students are also engaged in. While this course touches on all parts of the globe, our primary areas of focus are North America, South America, Africa, and Asia.

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 Columbus' first voyage in 1492 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 Christianity, the rise of Islam, medieval and Renaissance Europe, and medieval West Africa. Students also undertake individual research projects culminating in either 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 1500 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. The year culminates with an individual research project where students are responsible for determining the long-term causes of a current global issue. 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. During the second semester, students choose a particular non-Western civilization or nation and complete research projects on the impact on this society as a result of the Industrial Revolution and 19th century European imperialism. 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

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 will 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

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. In fact, one requirement of the course is for students to scan current economic news stories weekly and submit a brief commentary on one of 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, the advantages and disadvantages of economic globalization, and the causes of the Great Recession of 2007 in the United States. Meets UC “g” requirement.

AP U.S. Government

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.

Special Topics in the Humanities

This rotating series of interdisciplinary one-semester courses 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,” “Nigeria,” “China,” “Russia,” and “Iran and Iraq.” This year’s offerings are “Indigenous US” and “South Africa.” Please see English 11/12 electives for course descriptions. Meets UC “b” or “g” requirement.

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
- An independent research project and/or internship for 2 or 4 units (60-120 hours of academic work)
- Attendance at STIP seminars and events

While most STIP students will take science and computer electives offered by the school, they also have the opportunity to set up individualized Independent Studies programs supervised by Kirby faculty. 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. Middle school students complete a three year sequence of integrated science; the sixth grade focuses on Earth Science, the seventh grade investigates Life Science, and the eighth grade concentrates on Physical Science.

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: Earth Science

Sixth grade science is a hands-on course which exposes students to a variety of earth science topics, all the while stressing observation, the formulation of effective questions, and the pursuit of hands-on inquiry within the context of real world issues. This course focuses on a collaborative classroom environment and encourages students to investigate principles and construct knowledge in the role of scientists. Rather than studying earth science in the abstract, sixth graders will use scientific principles and real tools of science to understand these highly relevant issues in a context-driven setting.

Science 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, and activities 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, modelling, 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 a 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, protein synthesis, genetics and bioethics, as well as heredity, evolution, classification, and ecology. 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.

Honors Advanced Biology (Prerequisite: Chemistry or Forensic 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.

Chemistry (Prerequisite: Algebra 1)

In this introductory chemistry course, students hone scientific methods through hypothesis testing, experimental design, data collection, data analysis, report writing, and oral presentations. Topics include atomic and molecular structure, chemical bonds, conservation of matter and stoichiometry, gases and their properties, acids and bases, solutions, chemical thermodynamics, reaction rates, chemical equilibrium, 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. Research and public speaking skills are developed through independent projects and oral presentations. Groups work together to solve problems, complete labs, and share observations; this collaboration mirrors the professional collaboration that is integral to science. 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.

Forensic Chemistry (Prerequisite: Algebra 1)

This yearlong chemistry course contributes to the development and expansion of students' knowledge of the natural sciences. Forensic science is a multidisciplinary applied science encompassing several sub-fields of biology, chemistry, physics, and crime scene investigation (CSI). These subfields include toxicology, entomology, pathology, fire and trace evidence, genetics, serology, and more. This focuses primarily on the chemical aspects of forensic evidence and techniques used to analyze evidence. Students explore the ways in which chemical analyses and techniques as well as biological systems have changed and evolved over time. The course also focuses on problem solving within an interdisciplinary scientific, relevant context.

The main aim of forensic science is to apply scientific methods to substantiate legal investigations, thus highlighting the importance of following the scientific method accurately and communicating science effectively. The content of this course is taught using hands-on instruction such as examining mock crime scenes, analyzing evidence in laboratory activities, exploring presumptive and confirmatory tests, group and individual projects and activities, and more. Meets UC “d” or “g” requirements.

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.

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, sustainable agriculture, environmental hazards and human health, economics, politics, sustainability, environmental worldviews, and ethics. Meets UC “d” or “g” requirements.

Honors Physics (Prerequisite: Algebra 2)

This is a rigorous introductory course in physics. The course covers the fundamentals of two main broad topics in physics: mechanics and electricity. In mechanics, students study kinematics, dynamics, simple machines, pressure, energy, work, and mechanical waves. In electricity, students cover electrostatics, magnetism, circuits, and electromagnetism (including the EM spectrum). In addition, several smaller topics of interest may be addressed (time permitting), including atomic physics as a gateway to modern physics.

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

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.

COMPUTERS AND INFORMATION 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 their online courses, Zoom meetings, in-class research, paper writing, or online assessments. Our facilities are now equipped with a laser-cutting device and a 3D printer that students may use with proper training and teacher permission, and/or through the curriculum of some courses.

COMPUTER SCIENCE

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 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.

MULTIMEDIA ELECTIVES

Music Technology: 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.

Music Technology: 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.

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 populous. 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 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 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 fast-paced and taught primarily through problem solving by the students. Students are encouraged to work cooperatively with classmates to gain valuable skills for solving problems in a variety of areas. The courses include a rich mix of word 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 and real-life applications. Contexts include statistics, geometry, and probability, and major course concepts include linear equations, polynomials, fractions, ratios, percents, functions, systems of equations, rational and irrational numbers, quadratic equations, and exponential equations. Expressions, equations, and functions are described graphically, symbolically, and in tables. Meets UC "c" requirement.

Geometry (Prerequisite: Algebra 1)

This course is focused on proof, problem solving, and spatial reasoning. In addition to reviewing basic geometric concepts, students are introduced to the ideas of geometric 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 and logical 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 builds upon the foundation established in Algebra 1, with the following core units of study: Function Fundamentals, Variation & Graphs, Linear Functions & Sequences, Systems of Equations, Quadratic Functions, Power Functions, Inverse Functions, Exponential & Logarithmic Functions, Polynomials, and then (time permitting) a more basic investigation of Matrices, Trigonometry and Vectors, and Conic Sections. Projects and problem sets accompany a somewhat conventional route of study and assessment of these units. Students are expected to purchase and learn to use a graphing calculator for this course, and this calculator will also be utilized in subsequent mathematical coursework. Meets UC "c" requirement.

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

This is a year-long 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. A TI-83+ calculator is used extensively in class and is recommended for students in the course. Meets UC "c" or "g" requirements.

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 calculus. This course is typically followed by AP Calculus BC or AP Statistics. Meets UC “c” or “g” requirements.

AP Calculus AB (Prerequisite: Pre-Calculus)

This course begins with the foundational ideas behind the existence of instantaneous rates of change. Students explore continuity and instantaneous rates of change with the rigorous language of limits. In the first semester of this yearlong course, students learn to find derivatives of elementary algebraic and transcendental functions (variation, polynomial, exponential, logarithmic, trigonometric) along with their products, quotients and compositions. This allows for in depth application of derivatives including optimization and related rates. Theoretical content includes the Squeeze Theorem, Intermediate Value Theorem, Mean Value Theorem and Extreme Value Theorem. In the second semester the Fundamental Theorem of Calculus transitions us to a focus on Integrals. We derive methods to integrate each of the elementary functions and their combinations (partial fractions expansions, trigonometric integrals with identities, trigonometric substitutions and by parts). Students learn the applications of integral calculus to determining average values, particle motion, accumulation problems, area between curves, and Determining volume with cross-sections. Separable differential equations and slope fields are also investigated with a focus on application. The course concludes with preparation for the College Board AP exam in May. This AP course has College Board approval. 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.

AP Statistics (Prerequisite: Algebra 2)

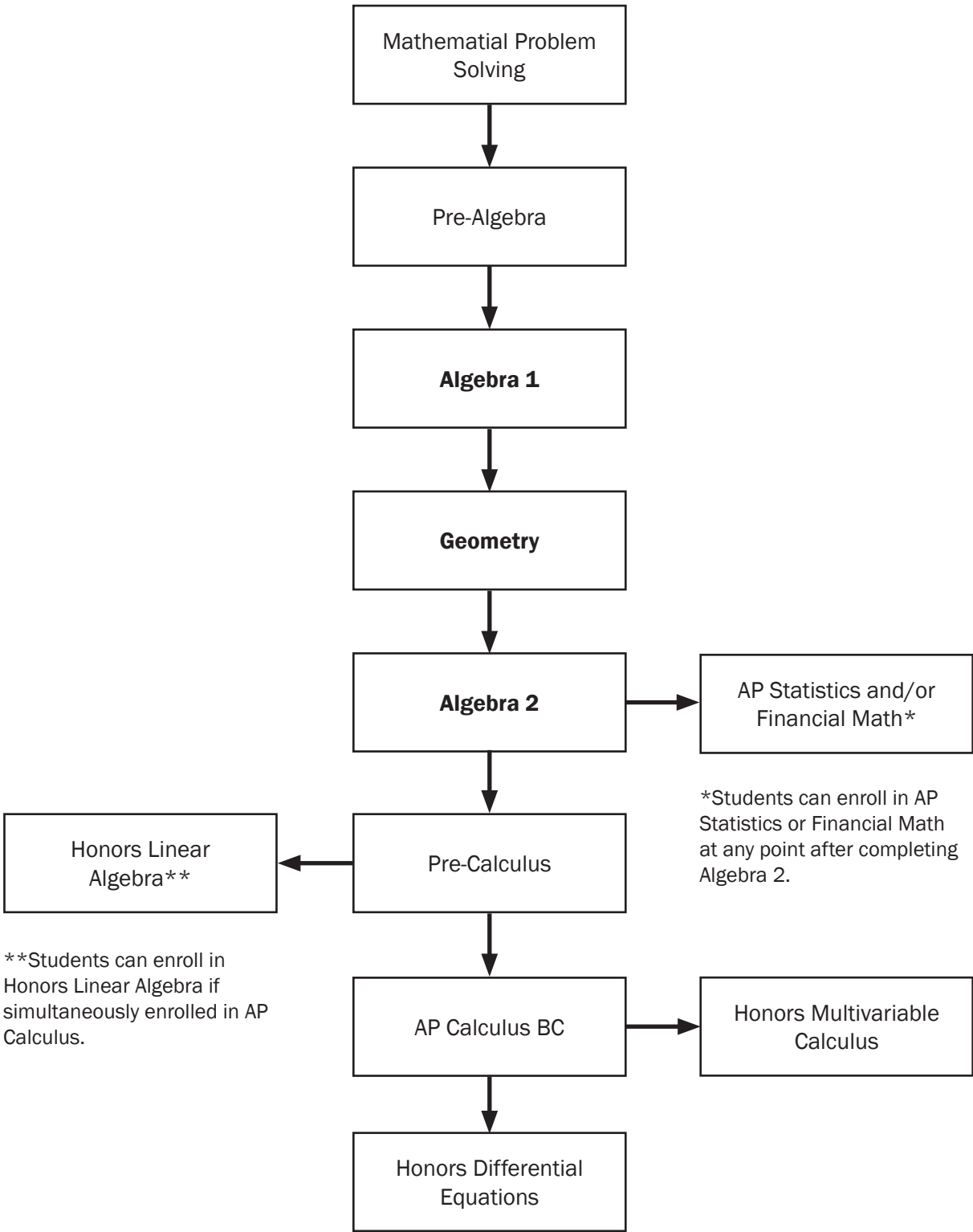
This yearlong course is a thorough and detailed introduction to elementary statistics. The goal is to learn and master the techniques necessary to successfully complete a statistics-based project and to understand the results and implications, recognize any shortcomings, and effectively communicate the results (conclusions/insights) to others. A key component to accomplishing this is the introduction and mastery of appropriate terminology and the language of statistics. The use of statistical tools (such as a calculator and computer) is required. The topics covered include graphical and numeric descriptions of data sets, normal distribution and z scores, correlation and linear least squares regression, data transformation for regression analysis, random samples and experiments, elementary probability, random variables (discrete and continuous), sampling distributions, the central limit theorem, confidence intervals, significance tests (one and two sample), 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.

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

The ability to use a language other than English to communicate, present, and interpret information is essential to succeed in the 21st century. Additionally, it is important to have the knowledge and experience necessary for the understanding of other cultures and worldviews, in order to fully participate in multilingual and multi-cultural 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 world 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 world 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 “Graduation Requirements” on page 7 and use their elective options for focused language study. LIP students complete 24 units in languages, including at least one language through Level 4.

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 any world language. 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 participation. 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 via recordings, films, and music. 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)

Utilizing the text *Enlaces* and the accompanying workbook, this course develops students' linguistic ability to an intermediate level, enabling them to communicate in a grammatically correct manner that can be understood by a native speaker. This requires an in-depth exploration of vocabulary and grammar that enables students to sustain conversation, reason abstractly, and begin to apply more complicated grammar. Students read and discuss selections from Spanish and Latin American literature and become familiar with idiomatic expressions and proverbs. An awareness of Spanish and Latin American cultures is enhanced with music, poetry, films, magazines, and newspapers. The textbook provides students with exposure to an extensive gallery of work by Latin American and Spanish artists. Meets UC "e" or "g" requirements.

Spanish 4: Advanced Spanish: Latin American Culture and Experience (Prerequisite: Spanish 3 or equivalency)

This course is designed for students who wish to enhance their oral communication skills. They acquire vocabulary, create oral narratives in all tenses, develop the ability to handle a variety of situations, negotiate differences of opinion, learn to make complex comparisons, and initiate and sustain a conversation. In addition, students acquire knowledge about life, problems, and current trends in Latin America and Spain. Students may enroll in this class either after the completion of Spanish 3. Meets UC "e" or "g" requirements.

Honors Spanish 5 (Prerequisite: Spanish 4)

This course is designed for students who wish to continue the study of Spanish. The main objective is to develop student's communication skills in Spanish. The fundamental objective of this program is for students to achieve a high level of ability in all four skills (listening, reading, speaking, and writing). Students demonstrate an understanding of the relationship between the practices and perspectives of the cultures studied. Students are exposed to a variety of materials and genres to help them expand their knowledge of formal Spanish in both oral and written forms. Readings include newspaper and magazine articles as well as literary selections. During this course, it is imperative that the students hear, read, write and speak exclusively in Spanish.

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. We will 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 we will 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 Latin: Special Topics (Prerequisite: Latin 3)

This course involves the study of advanced original Latin texts that are not covered in Latin 3 and Honors Latin: Vergil, along with Latin composition, and exploration of the role of Latin and Roman cultural products and ideas in our culture today. Students in this course will have increased opportunities to exercise choice in the topics and content for their advanced Latin studies. 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 advisor, students choose a general arts program of concentrated study in a specific discipline. This curricular path fulfills the University of California admission requirements. Students participating in AIP are expected to satisfy a 98-unit minimum graduation requirement. AIP requirements differ from the general program in three ways:

- A total of 18 additional elective units in the arts, supervised by a faculty advisor.
- Attendance at AIP seminars and events.
- A creative culminating project completed and presented in the senior year OR an internship in the arts completed by the beginning of senior year (2 units).

MIDDLE SCHOOL ARTS

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. Typically, sixth grade students take the grade-level courses of Improv plus World Art and Dance, seventh grade students study both fine art and music, and eighth grade students take dance and drama. 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.

Sixth Grade: Drama

Students learn the art of improv and various improv games to help in the development of a character and the skills needed to become an actor. The course also introduces students to musical theatre and the different skills used for that genre of acting.

Sixth Grade: Performing Arts

In this semester-long course, students learn to use body and voice expressively, maintain concentration and focus while in role development, and apply technical skills and knowledge to enhance dramatic communication. Students also learn the rudimentary skills of reading music and developing the use of one's voice as an instrument for music.

Seventh Grade: Visual Art

In this semester-long course students gain experience in two- and three-dimensional media, including pencil, charcoal, pastel, watercolor, acrylic, printmaking, sculpture, and ceramics. The art elements and design principles are emphasized as students develop imagery from both observation and imagination. Aesthetic awareness and possibilities for creative expression are explored as students observe and discuss the works of artists both within and outside of the academy. The project-based curriculum in mixed media presents opportunities to practice creative problem solving, critical thinking, and skill building in an interactive environment while exploring the relevance of art in culture and society.

Seventh Grade: Music Appreciation

The goal of this semester-long class is to provide students with the tools that help them learn about, experience, and enjoy music on a deeper level. Central to these goals are both “perceptive listening,” which explores why you enjoy what you enjoy in music, and also understanding the historical and cultural contexts that gave birth to a variety of music styles. It also offers a comprehensive and hands-on overview of different music ensembles, with regard to their uses and implications. The course focuses on Western Classical Music, Jazz, and Pop/Rock Music.

Eighth Grade: Drama

This semester-long arts rotation course introduces different aspects and styles of theater. Students learn the basic concepts of acting, improv, theater history and terminology, and scene and monologue performance. By participating in class activities, students build confidence to perform on stage.

Eighth Grade: Creative Composition in Dance

This semester-long course concentrates on dance composition and the creation of original dances. Students explore the methods and devices that form the compositional toolbox in the art of dance while developing original ideas for choreography and a plan for implementing their ideas into a fully realized dance piece. An emphasis is placed on creative collaboration and developing creative leadership skills. Study of dances and contemporary choreographers from across the globe enriches students’ cross-cultural perspectives and inspires their engagement with the diverse language of dance. The course culminates in a performance of original dance works choreographed and performed by the class.

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 will be performed and every effort will be made to include all students who would like to be a part of it. Students are graded based off of the Kirby production participation rubric.

Chorus Elective (yearlong, 2 units)

The Chorus vocal ensemble is open to students in grades 6 through 12. See the high school music course descriptions on page 32 for complete information.

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 after school once a week, and students are expected to practice on their own to develop their craft. See the high school music course descriptions on page 32 for complete information.

HIGH SCHOOL VISUAL ARTS

Art 1: Foundation

Art 1 serves as the foundation and prerequisite for all Visual Arts electives. It consists of primarily two-dimensional art, with a focus on drawing and painting. Media 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 transparent 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.

Photography 1 (Prerequisite: Art 1 or consent of the instructor)

This course is the exploration of the aesthetic and technical fundamentals of 35mm black and white, gelatin-silver photography. Using single lens reflex cameras and Kirby’s darkroom, students learn the theory and practice of shooting, developing, and printing within a context of photo history and diverse contemporary photographic practices. By refining enlargements beyond the initial proof stage and exploring experimental techniques and processes, students develop an eye for the art of photography and the variables that they can manipulate to create desired effects. The use of

photography for documentation, advertising, as well as fine art are important considerations and distinctions. Digital processes are introduced as adjunct tools for photo literacy. Each semester culminates with a hand-bound book containing a series of refined enlargements, coherent in subject, style, and theme. Field trips are an important support to class content.

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

Building on the fundamentals from Art 1, students cultivate aesthetic knowledge, sensation, and experience to support individual artistic statements in drawing, painting, and printmaking. The integration of different art media and styles from a variety of historical and contemporary genres provide the basis for students' growth in visual thinking and expression. From this broad exposure, students develop practical skills in two-dimensional art, sharpen their powers of aesthetic expression and perception, and gain knowledge of art's historic content and cultural significance. Students make extensions of course content by developing imaginative derivations through sketchbook practices, studio exploration, and participation in critiques. Meets UC "f" or "g" requirements.

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 required body of work in both gelatin silver and digital photography. Each semester culminates with a hand-bound book containing a series of refined enlargements, coherent in subject, style, and theme. Field trips are an important support to class content. Large format photography and alternative processes are an option for the motivated student.

HIGH SCHOOL PERFORMING ARTS

THEATER ARTS

There are many pathways to the heart of good performance. 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. Students perform rehearsed and improvised work at performances throughout the year. They are also exposed to other aspects of drama, including theater history and technology.

Drama 1: Fundamentals

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. Students develop emotional memory, awareness, and focus. Improvisation skills are applied to character development, enhancing moment-to-moment flexibility in performance, and creating new work. Meets UC "f" or "g" requirements.

Drama 2 (Prerequisite: Drama 1 or consent of instructor)

Drama 2 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 theatre, playwriting and much more. In this course student have the opportunity to participate in community theatre activities; 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. May be repeated for credit. Meets UC "f" or "g" requirements.

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, Play Performance II, Tech I or Tech II. 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.

DANCE

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.

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, treble 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)

A String Methods is a course for students new to, or in the beginning phases of learning how to play a string instrument. Fundamental skills are covered, such as: how to care for the instrument, basic music theory, reading music, playing by ear, and healthy playing techniques. As the year progresses, students learn how to transition from solo to ensemble playing, eventually preparing the student to participate in the Kirby Orchestra if desired. Students are encouraged to extend their connection to music outside of the classroom through listening activities, attending concerts, and creating original compositions. Kirby provides school-owned loaner instruments to participating students.

Chorus (yearlong, 2 units)

The Chorus vocal ensemble is open to students in grades 6-12 and meets before school on Monday, Wednesday, and Thursday. 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 three concerts each year and at other school and community events. Meets UC "f" or "g" requirements when taken in grades 9-12 when taken in grades 9-12.

Chamber Choir (Prerequisites: Chorus and 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. An audition is required and members must have been in the Chorus for one year or demonstrate an equivalent level of proficiency. Chamber Choir meets daily and 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 9-12 who demonstrate an upper-intermediate level of vocal ability and basic knowledge of music theory. The class meets before school on Tuesday and Friday. 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.

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

Orchestra is open to students in grades 8-12 and meets Mondays after school. The Orchestra studies a variety of instrumental repertoire from standard classical literature to film scores and rock/jazz music. The class meets Monday after school. 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 one afternoon 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.

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

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. The SELPH Program actively teaches the Six Pillars of Character: Trustworthiness, Respect, Responsibility, Fairness, Caring, and Citizenship. The Six Pillars of Character are ethical values to guide our choices. The standards of conduct that arise out of those values constitute the ground rules of ethical decision-making.

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 and Wellness (semester)

This class (for classes of 2022 and 2023 only), 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, physical wellness and sexuality (gender and sexual identity, consent, and healthy relationships). Through discussions, independent research, writing, journaling, and presentations, students engage in understanding the six dimensions of health—physical, emotional, social, intellectual, environmental, and spiritual (defined as a connection to something larger than oneself)—and explore socially relevant trends and current public health issues. Meets UC “g” requirement.

Health and Wellness A (semester)

This course (for class of 2024 and later only) integrates issues of personal and social health with strategies of achieving a life-long commitment to wellness. It offers the opportunity to learn and practice techniques for evaluating personal health risks and making decisions about individual behaviors that impact health and well-being. This course includes practical experience in stress management, scheduling, goal-setting, mindfulness, and also nutrition, social wellness, physical wellness, sleep, mental/emotional wellness, and sexuality (gender and sexual identity, consent, and healthy relationships). Students engage in the six dimensions of wellness—physical, emotional, social, intellectual, environmental, and spiritual (defined and connection to something larger than oneself)—and explore socially relevant trends and current public health issues. Meets UC “g” requirement.

Introduction to 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 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

The following information about Kirby's Athletic program may be impacted or altered by restrictions related to the CoVID-19 pandemic for the 2021-2022 school year. For more information, please contact our Director of Athletics: achristopher@kirby.org.

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 Mission Trails Athletic League (MTAL) 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:

- High School Sailing Team (all seasons)
- Middle School and High School Tennis (spring)
- Middle School and High School Coed Ultimate Frisbee Club (fall)
- Middle School and High School Mountain Biking Club (spring)
- High School Intramural Soccer (winter/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 *
		Swimming *
		Mountain Bike Racing
		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 3-8 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 Sierras for backpacking, reflection, and team building. *Retreats are virtual and online for the 2020-2021 school year due to CoVID-19 pandemic restrictions.*

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. *Impacted for 2020-2021 by CoVID-19 pandemic restrictions.*

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. *However, CoVID-19 pandemic-related restrictions are likely to impact field trips for 20-21.*

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.

FUTURE-YEAR 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 as 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 Comparative Government and Politics (yearlong)

The AP course in Comparative Government and Politics 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, as well as other countries of the students' choosing. 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.

Honors Advanced Chemistry (Prerequisite: Chemistry or Forensic Chemistry)

This is a one year course set up to be a more in-depth continuation to the Analytical and Forensic Chemistry courses 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 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 Latin 4 (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. 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 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 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 offers insight 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.

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.

Ceramics: Portfolio Preparation (Prerequisite: Ceramics or Art 1)

This course is designed to give students an opportunity to build their experience in the art of ceramics through the use of a variety of techniques. Working from small to large scale, students explore: bas-relief, hand-built sculptural art forms, and functionally designed objects. By working on a specific series of projects, students enhance their technical skills and participate in all stages of the firing process from bisque to glaze, with low fire and high fire options. The goal is to develop a body of work that has both breadth and personal focus while becoming literate in ceramic terms, standards, and practices. Wheel throwing is also an option for interested students.

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.

Drama 3 (Prerequisite: Drama 2 or consent of instructor)

Drama 3 is a course where students continue to study and develop their knowledge of theater with advanced scene study. Students refine the exploration of the concepts of self, body and voice work, improvisation, acting techniques, and reading and writing. Students learn directing and other production skills such as lighting and set design. Theater study at this level places a greater emphasis on the execution of skills, ensemble work, and collaboration with other student artists. Offered contingent upon sufficient enrollment.

Drama 4 (Prerequisite: Drama 3 or consent of instructor)

Drama 4 class continues the actor’s education in the history, cultures, and skills of theater. Students continue to develop acting warm-ups, theatre vocabulary, more advanced vocal technique, script and scene analysis, characterization, theatrical styles, script writing and more. Students also increase their understanding of theater through reading dramatic literature plays throughout the year.

Instrument Study

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.

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.

Multimedia Journalism

In the modern 24-hour news cycle, the world doesn’t rely strictly on print. Many newsrooms now require journalists to not only write copy but perform in radio, in video, via live internet streams, and through their own webpage platforms. Multimedia Journalism has shaped the way that we receive our news and most modern journalists now create a variety of multimedia material. Newspaper articles are delivered on the web and mobile devices, and these days Electronic Journalists are often printed in newspaper publications. Journalism is a confluence of print, audio and video—on the web, on tv screens, and on paper—that requires an understanding of creating multimedia as well as the use of digital media ethics. In this course students learn the digital media programs and ethics needed to create powerful multimedia to deliver journalism across a wide variety digital outlets. Meets UC “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.

Organic Chemistry (Prerequisite: B or higher in Analytical Chemistry) (semester)

In this course, students develop deeper understanding of concepts covered in analytical chemistry. Organic chemistry is devoted to the study of carbon compounds and the emphasis of this course is on the nomenclature and properties of organic compounds, stereoisomerism, and reaction mechanisms. The course also covers acid/base chemistry as it relates to organic chemistry, aromaticity, and electrophilic and nucleophilic reactions and mechanisms. Additional topics may include the study of functional groups, spectrophotometry, and the chemistry of amino acids and their importance in the formation of biological compounds. Students are introduced to these basic concepts of organic chemistry and amino acid chemistry through content and laboratory simulations and demonstrations.

Physics (Prerequisite: Geometry)

This is a traditional college prep physics course focusing on Newtonian mechanics and kinematics 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.

Video 1 (Prerequisite: Photography, Creative Writing or Drama 1)

During this semester-long course, students investigate: 1) how to decipher a film/video’s ideology (meaning); and 2) how a film/video’s form (cinematography, editing, dialogue, mise-en-scene, lighting, sound and color) helps to tell a story and convey meaning. In addition to analyzing various short and feature length films/videos, students create 2-3 group projects that express an important ideology by using intentional elements of film form.

Video 2 (Prerequisite: Video 1)

During this semester-long course, students investigate how social issues such as race, gender and sexuality are represented in Hollywood and Independent film. In addition to analyzing short and feature length films/videos, students write independent screenplays, vote on which screenplays to produce, and then work on a video crew to produce a 3-7 minute short film.



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