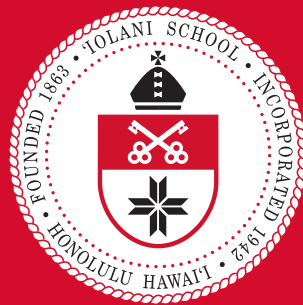


**'IOLANI SCHOOL**

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**2020-21 COURSE  
CATALOGUE**



# » 2020-21 CALENDAR

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First Day of School . . . . .	August 24, 2020
Labor Day . . . . .	September 7, 2020
Discoverers' Day . . . . .	October 12, 2020
Fall Break . . . . .	October 23, 2020
Veterans' Day (Observed) . . . . .	November 11, 2020
Thanksgiving Break . . . . .	November 26 & 27, 2020
Christmas Break . . . . .	December 18, 2020 - January 3, 2021
School Resumes . . . . .	January 4, 2021
Semester Exams . . . . .	January 14 & 15, 2021
Martin Luther King, Jr. Day . . . . .	January 18, 2021
Presidents' Day . . . . .	February 15, 2021
Spring Break . . . . .	March 19 - March 28, 2021
School Resumes . . . . .	March 29, 2021
Good Friday . . . . .	April 2, 2021
'Iolani Fair . . . . .	April 16 & 17, 2021
Head of School's Day . . . . .	April 19, 2021
Memorial Day . . . . .	May 31, 2021
Final Exams . . . . .	June 1 - June 3, 2021
Graduation . . . . .	June 5, 2021

Visit [www.iolani.org](http://www.iolani.org) for additional calendar listings.

# ‘IOLANI SCHOOL

## COURSE CATALOGUE



‘Iolani School is a co-educational, college preparatory school for grades K-12 founded in 1863 after a request by King Kamehameha IV and Queen Emma to the Church of England. The school’s mission is to develop liberally educated, well-rounded individuals who are well prepared for higher education and for responsible moral citizenship.

This catalogue lists courses available to students in grades 7-12 during the 2020-21 academic year.

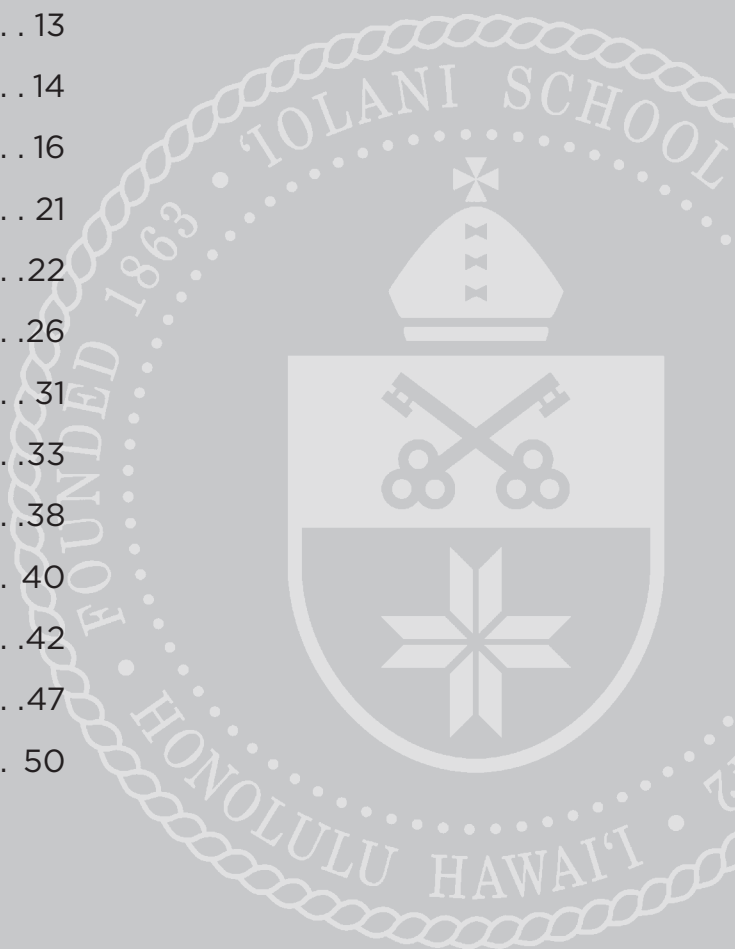
‘Iolani School  
563 Kamoku Street  
Honolulu, Hawai‘i 96826

(808) 949-5355 | [www.iolani.org](http://www.iolani.org) | [info@iolani.org](mailto:info@iolani.org)

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# » COURSE OF STUDY

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At 'Iolani, academic excellence and students' personal growth are fostered through dynamic and innovative teaching in a multitude of disciplines to develop intellectual, personal and physical potential.

The Upper School curriculum of 'Iolani is designed to meet the entrance requirements of leading colleges, while also encouraging students to become competent learners, skilled in reading, writing, mathematics and effective at communicating well in speech, writing, world language and the arts. At the same time, course offerings are sufficiently flexible and broad in scope to meet individual needs and interests.

Minimal requirements for a diploma (see below) are supplemented by electives which are chosen according to individual aptitudes and interests. Annually, each student chooses a course of study in consultation with his or her counselors, the appropriate department heads, the Dean of Upper School and the Dean of Studies.

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## DIPLOMA REQUIREMENTS

All students are required to take a minimum of four courses each semester, not including art, music, and physical education.

Eighteen and a half units are required for a diploma. They must include the following:

1. Four years of English.
2. Three levels of the same world language and through the sophomore year.\*\*
3. Three years of math through Algebra II and math through the junior year.\*
4. Three years of history including History of the Modern World in Grade 9 and U.S. History in Grade 10.
5. Three years of science, including Biology and Chemistry.
6. Required courses in art, religion, health and physical education.

The rest of a student's courses may be selected from a wide range of electives to bring the total to eighteen and a half

\*A grade of C- or higher is required for placement in the next sequential level.

\*\* (Only up to level 3) B- and teacher's recommendations are needed for higher levels.

## A TYPICAL SIX-YEAR PROGRAM

The following six-year program will serve as a general guide for entering students:

### GRADE 7:

---

English  
World Language  
Pre-Algebra  
Science  
World Geography  
Guidance/Physical Education/The Arts\*  
Elective (optional)  
Art, iDepartment, Performing Arts

### GRADE 8:

---

English  
World Language  
Algebra  
Science  
Social Studies  
Religion/Physical Education\*\*  
Elective (optional)  
Art, iDepartment, Performing Arts

### GRADE 9:

---

English  
World Language  
Algebra I/Geometry  
Biology/Biology Honors  
History of the Modern World  
Lifetime Health/Sequence 9  
Elective  
Art, iDepartment, Performing Arts

### GRADE 10:

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English  
World Language  
Geometry/Algebra II  
Chemistry/Chem H  
U.S. History  
Religion†  
Physical Education\*\*  
Elective  
Art, iDepartment, Performing Arts

### GRADE 11:

---

English Electives  
World Language  
Algebra II/Math Elective  
Physics/AP Physics/Science Elective  
Religion†  
Physical Education\*\*  
History Elective\*\*\*  
Elective  
Art, iDepartment, Performing Arts

### GRADE 12:

---

English Electives  
History Elective\*\*\*  
Religion†  
Other Electives as needed  
(four solid courses minimum)

† *One semester of religion must be taken in Grade 10, 11, or 12.*

\* *One quarter each subject*

\*\* *Two quarters each subject*

\*\*\* *Two semesters or year of History must be taken in Grade 11 or 12.*

## REPORTS

Reports are sent electronically to the parents of all students at the end of each quarter (see School Calendar). In addition, mid-quarter reports are sent if a student is having academic difficulty.

## PROVISION FOR GIFTED AND ACCELERATED STUDENTS

‘Iolani accommodates students of all ability levels. Just as extra help from teachers and peer tutors is available as needed, a variety of provisions is also available for gifted and accelerated students.

## HONORS AND ADVANCED PLACEMENT EXPECTATIONS

‘Iolani offers 30 Advanced Placement courses in many academic areas, including English, History, Computer, Math, Performing and Visual Arts, Research, Science, and World Languages. These courses, part of an international program recognized by thousands of schools and colleges, present outstanding secondary school students with college-level curriculum. Although colleges differ in how they recognize AP scores, students who succeed on AP examinations or digital portfolios may earn college credit based on their test performance, or be allowed to skip introductory courses and move directly into upper-level classes. Selective colleges strongly encourage students to challenge themselves. Taking AP courses is one way to do so.

Advanced Placement work, however, is not for everyone; for many students, the normal pace of ‘Iolani School is sufficiently challenging. Under no circumstances should a student’s grounding in the fundamentals be compromised in order to take an AP course. Students enrolled in AP courses must take the AP examination or submit their digital portfolio and are responsible for the AP exam fee. Failure to do so without prior administrative approval will result in a failure for the course.

Below are some specific guidelines to help you plan ahead and to provide direction in making decisions that are in the best interests of your child.

## ACCELERATION GUIDELINES

### ENGLISH:

AP English Literature is open to seniors who have earned As and Bs in their most recent English course. It is recommended for students who want the challenge of a rigorous, college-level English class. Students analyze and interpret works from several different genres and periods.

### HISTORY:

To take an AP course in the History Department, a student should:

1. Earn As or Bs in their most recent history course.
2. Have the recommendation of their most recent history teacher.

PSAT scores will also be considered in the placement process.

### WORLD LANGUAGE:

To take an AP Language for French, Latin or Spanish, a student should:

1. Have completed Level 3 Honors or Level 4
2. Have the consent of the instructor

To take AP Language for Chinese or Japanese, a student should:

1. Have completed Level 4 Honors
2. Have the consent of the instructor

### MATHEMATICS:

A student is placed in the honors track of mathematics on the basis of entering SSAT scores, teacher recommendations, and grades in ‘Iolani math courses. To remain in the honors track, a student must maintain a B-average or better.

To take AP Statistics, a student should:

1. Have earned at least a B- in Trigonometry.

To take AB Calculus, a student should:

1. Have earned at least a B- in Precalculus regular or have at least a C- in Precalculus Honors, and teacher’s recommendation.
2. Completion or concurrent enrollment in Physics

To take BC Calculus, a student should:

1. Have earned at least a B- in Precalculus Honors and teacher’s recommendation.

## ACCELERATION GUIDELINES (CONTINUED)

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### SCIENCE:

ʻIolani School's Science Program for Grades 9–12 has a three-year requirement which includes biology, chemistry, and a year of science electives. Please note that some of our courses and many colleges do require completion of Physics. As such, for many of our students, Physics may be the best option for a student's third year in science. Specific course requirements are outlined below.

To take AP Biology, a student should:

1. Complete Chemistry or be concurrently enrolled in Chemistry Honors or AP Chemistry.
2. Earn a B or better in his/her most recent science course.
3. If a 10th grader, an A- in Biology Honors and the approval of the biology teacher required.

To take AP Chemistry, a student should:

1. Have completed Honors Chemistry with a B+ or higher or Chemistry with an A- or higher.
2. Complete or be concurrently enrolled in Precalculus.
3. If a 10th grader, complete Biology Honors with a B+ or better; the approval of the instructor and the Dean of Studies is also required; English 9 grade and/or PSAT/TOEFL reading scores will be considered in the approval process.

To take AP Physics 1, a student should:

1. Complete Chemistry Honors with a B+ or better or Chemistry with an A- or better.
2. Complete or be concurrently enrolled in Algebra 2B / 2H
3. Have their Chemistry teacher's recommendation.

To take AP Physics 2, a student should:

1. Have completed AP Physics 1, earning a B or better, or Physics, earning an A- or better. AP Physics 1 may also be taken concurrently.
2. Have concurrent enrollment in Precalculus, Precalculus Honors, or Calculus.
3. Have the recommendation of their previous science teacher.

To take AP Physics C, a student should:

1. Be concurrently enrolled in Calculus.
2. Have completed Biology, Chemistry and AP Physics 1.
3. Have the recommendation of their previous Physics teacher.

### ART:

AP 3-D Art and Design is recommended for senior students who:

1. Have the recommendation of the course instructor.
2. Have completed prerequisite course(s)\* in excellent standing.
3. Exhibit artwork that establishes the applicant as a committed artist who is capable of meeting the rigor of the AP Art and Design curriculum.

To take AP 3-D Art and Design, a student should:

1. Complete two semesters of Design 3D before approval.

To take AP 3-D Art and Design (Ceramics), a student should:

1. Complete two semesters of Ceramics before approval.

To take AP 3-D Art and Design (Mixed Media), a student should:

1. Complete four semesters of Mixed Media before approval.

To take AP Drawing, a student should:

1. Complete two semesters of Drawing or one semester of Drawing and one semester of Painting, (additional semesters in Drawing and/or Painting recommended) before approval.

In addition to the AP courses described above, ʻIolani School offers the following AP courses. Please visit the department's section of this catalog for course descriptions and prerequisites.

- AP Computer Science Principles (iDepartment)
- AP Music Theory (Performing Arts)
- AP Psychology (Additional Courses)
- AP Seminar and Research (Additional Courses)

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## INDEPENDENT STUDY PROGRAM

Seniors and second semester juniors are eligible to present a proposal for independent study in a subject not offered as a regular course at ʻIolani. A student may request honors or regular weighting or a pass-fail grade. The proposal must be approved by the Dean of the Upper School and Dean of Studies in consultation with the relevant department head; First semester or year proposals must be submitted prior to June 10 of the academic year preceding the proposed semester/year course. Second semester proposals are due before December 1 of the semester preceding the proposed second semester course. Interested students should see a dean for information.





## COURSE ADDITIONS AND WITHDRAWALS

Careful consideration should be given to course planning during the spring registration season. Once course schedules are finalized in the summer before the opening of the school year, changes to those schedules will be made only in very limited circumstances. In the first three weeks of the semester, the addition of courses to a student's schedule will be limited to P.E. changes and level changes within the same course (i.e. Biology Honors to Biology). Other additions may only be made with the approval of the Upper School Dean and the Dean of Studies.

Courses may be dropped or level changes made without penalty ONLY prior to the first mid-quarter evaluation for the course. Drops or changes after the first mid-quarter require approval of the Dean of Upper School and the Dean of Studies. Courses dropped without such approval are recorded as failures.

Semester courses dropped with administrative approval between the first mid-quarter and the first quarter grading period of a course are recorded as W (withdrawn). Semester courses dropped with administrative approval after the first quarter (or third quarter for second semester electives) are recorded as WP (withdraw passing) or WF (withdraw failing).

Year-long courses dropped with administrative approval after the first mid-quarter but before the first quarter are recorded W (withdrawn). Some courses may only be dropped prior to the first mid-quarter, at the end of the quarter and at the end of the semester. Students may drop levels from any Honors or AP course by the first mid-quarter. Any drops thereafter require the approval of the Dean of the Upper School and the Dean of Studies. The grade a student is earning at the time of the drop will transfer with him or her into the replacement course.

Year-long courses dropped during the second quarter with administrative approval are recorded WP or WF. Year courses dropped after the first semester are recorded as failures and do not receive credit.

Any course dropped without the approval of the instructor, the Dean of Upper School and the Dean of Studies is recorded as a failure and will be so calculated in the GPA.

## ACADEMIC PROBATION

A student is placed on academic probation when, in the judgment of the teachers, counselors, and deans, he or she is not realizing sufficient academic success to warrant continued matriculation. In such cases a period

of time is set within which the student must demonstrate significant improvement or face dismissal.

A student on either academic or disciplinary probation may not hold elective office (including Senior Prefects), serve as a member of the May Day Court, or receive school-sponsored academic or athletic awards.

## **FAILED COURSES**

**GRADES 7 AND 8:** All students must pass English, History and Science with a D- or better. In order to continue at 'Iolani, a student must repeat courses in math or world language if the student earns less than 70% on his/her final grade. If repeating is not in the student's best interest, an alternate provision will be made, or withdrawal from 'Iolani will be advised.

**GRADES 9-11:** Failed courses receive no credit, and the failure counts in the computation of the GPA. A student may (and in some cases, must) repeat a failed course. Only the grade earned in repeating the course counts in the GPA, and the student receives credit for the course. The failing grade remains on the permanent record card and transcript.

**SENIORS:** A senior who fails a 1st semester course must repeat it in the 2nd semester if it is offered. If it is not offered, a comparable course in the same department will be selected with the approval of the College Counselor and the Dean of Studies. A senior who fails a required year or second semester course must repeat it (or a comparable one approved by the Dean) satisfactorily before receiving a diploma and may not participate in the graduation ceremony. A senior who fails a year or second semester elective course may participate in the commencement exercises only with the permission of the Head of School. The Head of School will use his discretion and consult with appropriate teachers, counselors and administrators to reach a decision.

## **ELIGIBILITY**

A student who fails any course, or any quarter of any course, is excluded from school-sponsored extra-curricular activities for at least the first four weeks (until the mid-quarter evaluation) of the following quarter.

Eligibility is determined on a quarterly basis. A student failing any course or any quarter of any course is ineligible for the first half of the immediately subsequent quarter.

Fourth quarter failures carry over to the first quarter of the following year unless the failed course is passed in summer school, or unless the teacher of the failed course

presents mitigating circumstances at the year-end grade level meeting in June.

Extra-curricular activities from which a failing student shall be excluded include but are not limited to: drama, cheerleading, politics, speech and debate, and athletics. A student who is declared ineligible may not practice, rehearse or participate in any way in any extra-curricular activity for the entire term of the ineligibility. The only exception to this is that a student may attend tryouts for a team. If successful in making the team, the student may not participate in subsequent practices or workouts until after regaining eligibility.

At the mid-quarter evaluation period, an ineligible student must be earning passing grades in all courses in order to regain eligibility for the remainder of the quarter.

Courses failed in the fourth quarter may be made up in summer school. The student usually must retake the failed course at 'Iolani if the 'Iolani Summer School offers it. Courses taken at other schools must have advance approval from the Dean of Studies before credit will be granted by 'Iolani. English courses cannot be repeated for credit in the summer.

## **ACADEMIC DISMISSAL**

The Head of School, acting upon the recommendation of the teachers, counselors, and deans, may dismiss a student from 'Iolani for academic reasons at any time when in the opinion of the teachers, counselors and administrators continued study at 'Iolani is not in the school's or student's best interest.

# UPPER SCHOOL SCHEDULES

## A-F SCHEDULES

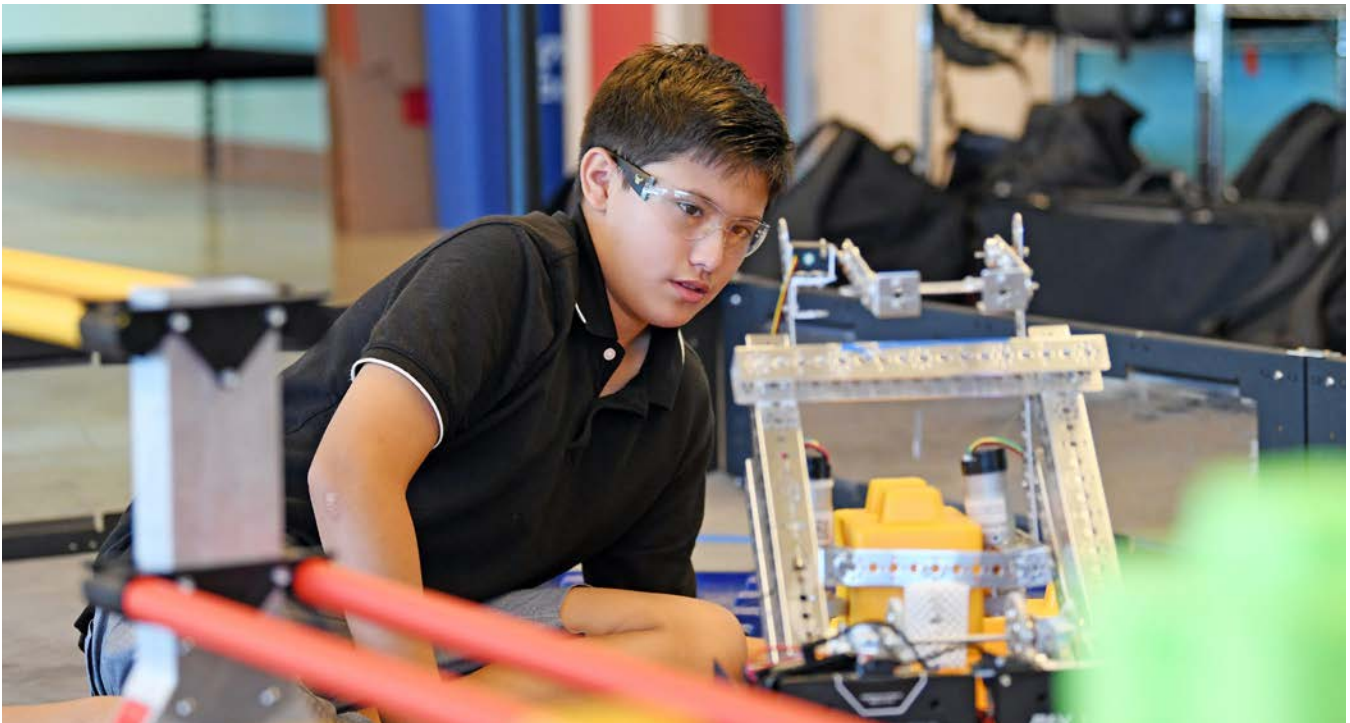
TIME	A	B	C	D	TIME	E	F	ALTE	ALTF
7:40-8:10	Homeroom/ Chapel	Homeroom/ Chapel	Homeroom/ Chapel	Homeroom/ Chapel	7:40-8:10	Homeroom/ Chapel	Homeroom/ Chapel	Homeroom/ Chapel	Homeroom/ Chapel
8:15-9:10	1	7	5	3	8:15-9:25	1	5	3	7
9:15-10:10	2	8	6	4	9:30-10:40	2	6	4	8
10:10-10:20	Break	Break	Break	Break	10:45-11:40	Meeting	Meeting	Meeting	Meeting
10:20-11:15	3	1	7	5	11:45-12:30	Lunch	Lunch	Lunch	Lunch
11:20-12:15	4	2	8	6	12:35-1:45	3	7	1	5
12:15-1:00	Lunch	Lunch	Lunch	Lunch	1:50-3:00	4	8	2	6
1:05-2:00	5	3	1	7					
2:05-3:00	6	4	2	8					

## E-F SCHEDULES WITH ASSEMBLIES

TIME	E1	F1
7:40-7:45	Homeroom	Homeroom
7:50-8:35	Chapel/ Assembly	Chapel/ Assembly
8:40-9:50	<b>1</b>	<b>5</b>
9:55-11:05	<b>2</b>	<b>6</b>
11:05-11:40	Meeting	Meeting
11:45-12:30	Lunch	Lunch
12:35-1:45	<b>3</b>	<b>7</b>
1:50-3:00	<b>4</b>	<b>8</b>

TIME	E2	F2
7:40-8:10	Homeroom/ Chapel	Homeroom/ Chapel
8:15-9:25	<b>1</b>	<b>5</b>
9:30-10:40	<b>2</b>	<b>6</b>
10:45-11:30	Assembly	Assembly
11:30-12:30	Meeting/ Lunch	Meeting/ Lunch
12:35-1:45	<b>3</b>	<b>7</b>
1:50-3:00	<b>4</b>	<b>8</b>

TIME	E3	F3
7:40-8:10	Homeroom/ Chapel	Homeroom/ Chapel
8:15-9:25	<b>1</b>	<b>5</b>
9:30-10:40	<b>2</b>	<b>6</b>
10:45-11:55	<b>3</b>	<b>7</b>
11:55-12:55	Meeting/ Lunch	Meeting/ Lunch
1:00-2:10	<b>4</b>	<b>8</b>
2:15-3:00	Assembly	Assembly



# SPECIAL PROGRAMS

The Special Programs Office serves to support the growth and development of 'Iolani's students, families, and communities by offering unique and diverse courses through After School and Summer Programs.

## **AFTER SCHOOL PROGRAMS**

'Iolani After School Programs offer a variety of enrichment courses during the academic year including After School Care, visual and performing arts, STEM, sports and P/SAT prep.

## **SUMMER PROGRAM**

### **DAY PROGRAMS**

Students entering grades K through 12 may enroll in a variety of morning and afternoon academic and enrichment classes. Courses are designed to meet students' needs not only in preparation for the regular school year, but to enrich their knowledge and curiosity through engaging curriculum and interactive learning environments. 'Iolani Summer Programs welcome students from the community and abroad, as well as its own student body. Current 'Iolani students have priority for course enrollments.

### **RESIDENTIAL PROGRAMS**

'Iolani offers summer courses for summer boarding students entering Grades 7-9. Students have the opportunity to enroll in the core academic day programs, academic offerings focused on STEM and "The First Tee Hawaii" golf program. Boarding students will find balance in their schedule between their daily interests on campus and opportunities to enjoy various excursions around O'ahu.

Information on Summer Programs and course offerings are available on the school's website.

*Students who are dismissed for disciplinary reasons may not enroll in summer classes until they have been readmitted to 'Iolani School or have approval by the Dean of Upper School.*

*Summer courses taken for credit at other schools by 'Iolani students must have advance approval from the Dean of Studies before credit will be granted by 'Iolani.*

# HONORS, AWARDS, AND PUBLICATIONS

Two honors days are held each year. In September recognition is paid to underclassmen who have achieved outstanding academic success during the previous year. In May, the activity awards, service awards, special prizes, academic awards to seniors, and special academic prizes are presented.

## HEADMASTER'S LIST

The Headmaster's List is reported quarterly and yearly, and includes students who maintain a grade point equivalent of 3.5 or better, with no grade lower than a B- and with no unsatisfactory or incomplete report.

## HONOR ROLL

The Honor Roll is reported quarterly and yearly, and includes students not on the Headmaster's List but who maintain a grade point equivalent of 3.0 or better, with no grade below a C- and no unsatisfactory or incomplete report.

## HEADMASTER'S CERTIFICATES

Headmaster's Certificates will be awarded to students in grades 7-11 who have earned a 3.5 grade point average or better for all four quarters and final grades of the academic year, have no quarterly or final grade below a B- and no unsatisfactory or incomplete reports. Headmaster's Certificates will be awarded to those seniors who have been on the Headmaster's List for the first three quarters of their senior year.

## CUM LAUDE SOCIETY

'Iolani is the only school in Honolulu honored by membership in the Cum Laude Society. This honor society was established in 1906 to reward and encourage scholars on the secondary school level. Only three hundred sixty schools in the United States have been granted membership. Twice a year the 'Iolani chapter elects seniors based on their academic standing.

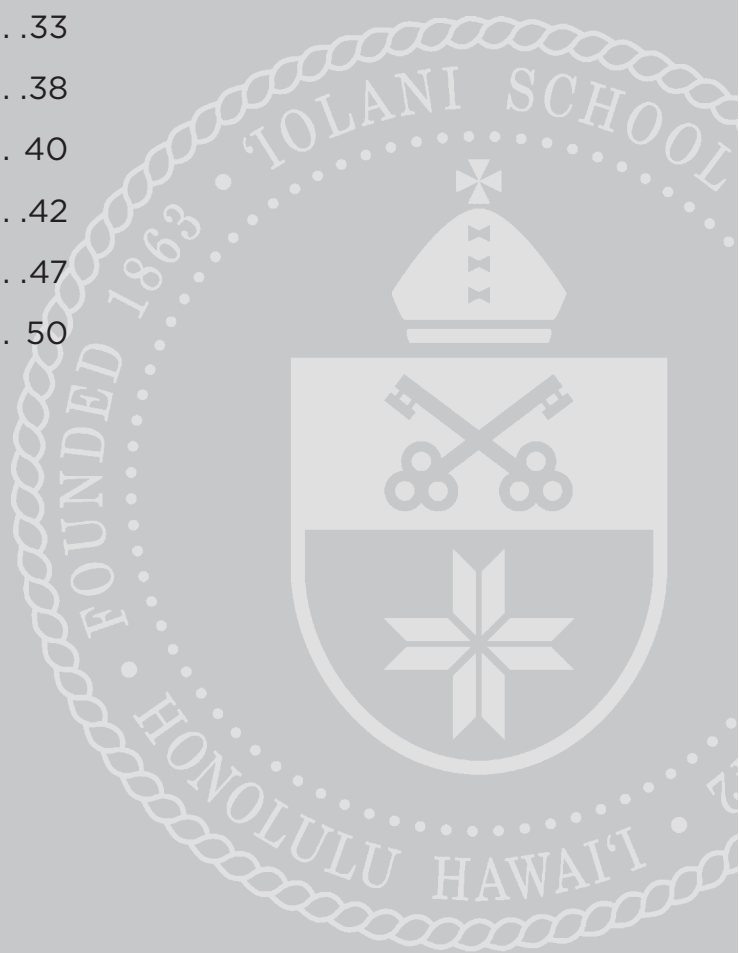
## PUBLICATIONS

Students possessing literary aptitude or inclination can become involved in one or more school publications, which include *Imua*, the school newspaper; *Ka Mo'olelo O 'Iolani*, the school yearbook; and *Mane O Ke Ola*, the literary magazine. Opportunities consist of writing, editing, photography, advertising and artwork. Students in grades 7 and 8 are encouraged to write for *Scribes and Scribbles*.

# » 2020-21 COURSES

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Art .....	14
English .....	16
Health Education .....	21
History .....	22
iDepartment .....	26
Mathematics .....	31
Performing Arts .....	33
Physical Education .....	38
Religion .....	40
Science .....	42
World Languages .....	47
Additional Courses .....	50





# ART

The 'Iolani Art program operates on the assumption that everyone has a unique way of seeing, thinking, and feeling. Students take a sequential series of classes, starting in the seventh grade and finishing in the twelfth grade. A student may select to work in any of the art offerings on a semester basis. Aesthetic growth occurs as students develop perceptual awareness and standards of critical judgment. The program encourages students to question and seek new relationships between ideas and materials.

**GRADE 7 ART SEQUENCE** is a six-week course that features basic drawing techniques and a ceramic hand-building unit. Through excursions, discussions, and written assignments, students broaden their concept of art as a universal form of communication and a source of life-long pleasure.

**GRADE 9 ART SEQUENCE** exposes students to varied media and techniques in the visual arts. During a nine-week period, students learn about the materials, tools and concepts necessary to develop their skills. They are invited to continue their studies in elective courses within the Art Department.

**CERAMICS** (Grades 9-12) allows students to work with a malleable, three-dimensional medium to develop an awareness of the relationship between form and function. Project-based assignments involving both wheel-throwing and hand-building techniques let them experience different ways of creating, and increase their appreciation of excellence in design and craftsmanship.

**DESIGN 3-D** (Grades 9-12) emphasizes solving problems in three-dimensional space. Students investigate original design as it relates to a variety of materials. The correct use of tools and craftsmanship are stressed. The class works in wood, brass, steel, copper, silver, clay and glass.



## ART (CONTINUED)

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These materials can be used in combination to allow students to explore and understand the possibilities in three-dimensional form.

**DRAWING** (Grades 8-12) classes begin with a series of exercises enabling students to practice pencil technique and cultivate sensitivity in observed form. Structural strategies, conceptual development, and color awareness are taught and reinforced at every level. Still life, portraiture, and linear perspective drawing, along with linoleum block printing, art history, art analysis, and museum field trips, round and strengthen the student's art foundation. Explored media includes graphite and colored pencil, charcoal, pastel, conté crayon, marker, ink, and digital applications.

**MIXED MEDIA** (Grades 8-12) seeks to develop student artists who are confident in creating artworks that communicate a social, political or personal message. Conceptual development is the dominant feature of the course along with the exploration of non-traditional materials and the repurposing of recyclables. Projects consist of collage, assemblage, printmaking, textile/fiber, sculpture, ceramics and wearable art. Field trips to museums and galleries fortify students' outlook and appreciation toward art, and are frequently scheduled throughout the semester.

**PAINTING** (Grades 9-12) focuses on developing the student's skills in creating image with paintbrush, pigment, and color. Students learn to manipulate stroke and utilize complex color mixtures to direct emphasis and coax visual voice in their painted artwork. Regular peer critiques serve to assist awareness of work in progress. Explored level 1 media includes oil pastel, watercolor paint, and acrylic paint. Monotype printing, assemblage, and painting with oils are introduced in level 2. Painting 1 is open to students who have completed at least one semester of Drawing in Grade 9 and above or have permission of the instructor.

**PHOTOGRAPHY** (Grades 9-12) students acquire a working knowledge of digital capture, editing and output, primarily using digital SLR cameras, software and printers. Beginners learn concepts and considerations of exposure, lighting, perspective and composition. Intermediate students incorporate conceptual meaning and narrative into their work through combining or compositing photos. Studio strobe lighting and darkroom processes are also introduced. Advanced students develop their aesthetic and refine their skills by independently producing a cohesive body of work

based on a theme of their choice. All classes consist of mixed levels, providing exposure to a variety of topics and techniques, as well as opportunities to review them. Critique sessions encourage constructive dialogue among peers.

### » ADVANCED PLACEMENT

AP Art is an intensive art curriculum designed for students who have demonstrated superior conceptual and technical ability in art, and maturity for independent work. Study in this program will develop the student's creative and systematic investigation of idea and form, while encouraging personal artistry and evolution. Prerequisite coursework and recommendation of the instructor are required for AP Art and Design enrollment.

#### **AP DRAWING**

(full year, seniors only)

#### **AP 3-D ART AND DESIGN**

(full year, seniors only)

#### **AP 3-D ART AND DESIGN - CERAMICS**

(full year, seniors only)

#### **AP 3-D ART AND DESIGN - MIXED MEDIA**

(full year, seniors only)



# ENGLISH

The goals of the English Department are to teach students to read intelligently, to think logically, to express themselves clearly, and to enjoy literature. An intense writing program and a variety of speaking activities ensure that clear writing and oral communication skills develop through a sequential program from Grades 7-12. Students read literature to understand and appreciate the ideas authors express in their writing, the styles and forms in which works are written, and the cultures from which the literature springs. Activities emphasize careful listening and effective speaking skills. A variety of texts (short stories, poetry, drama, and novels) help students reflect on their own choices and growth.

**ENGLISH 7** lays the foundation that students will build upon throughout Upper School. The course includes a broad base of reading, writing, and speaking. Through core and free-choice texts, students develop literacy skills, such as close reading, writing across genres, and public speaking, within the reading and writing workshop framework.

**ENGLISH 8** is designed to enhance students' written and oral appreciation of language and literature. Through a varied and sequential program of reading, writing

and language, students develop critical thinking skills. They study short stories, poetry, drama, novels, and mythology; building upon and refining language skills introduced in the seventh grade, they compose essays, poetry, reflections, and literary responses. To hone their craft as writers, they continue their study of grammar, usage, and mechanics.

**ENGLISH 9** focuses on the analytical study of local and world literature as well as on students' oral communication skills. Students read short stories, poetry, drama and

## ENGLISH (CONTINUED)

novels. Writing assignments are designed to develop analytical and creative writing skills. In-class discussions, oral interpretations of literature, and formal speech assignments, combined with digital recordings, peer feedback, and teacher evaluation, help students to practice and assess their oral skills.

**ENGLISH 10** introduces students to the themes and landscapes of American literature through the study of diverse voices from early to modern America. The emphasis is on close reading and literary analysis of short stories, poetry, drama, and novels. Students will be asked to hone and develop their public speaking skills from previous English courses through class activities such as oral and dramatic presentations, as well as to continue developing their critical thinking and writing skills in preparation for future English electives.

### » ELECTIVES FOR GRADES 11 AND 12

**Graduation requirements: All students must take classes in pre-1900 literature, post-1900 literature, and writing and/or speaking skills. Students must take at least one class from each category over two years. \*Students must take one literature course per year, indicated with an asterisk.**

#### PRE-1900 LITERATURE

**\*AFRICAN AMERICAN STUDIES** (one semester) explores the African American experience and how that experience has been reflected in history, literature, and the arts. Students survey some of the political, legal, social, cultural, and literary aspects of African American history, read a major novel, and examine a selection of poetry and short prose by prominent African Americans. Course assignments include essays on literary themes and historical problems, personal responses to assigned readings, film reviews, a major research paper, and a creative project.

**\*BRITISH LITERARY EXPERIENCE** (full year, juniors only) is an English elective that examines the literature of Great Britain, including short stories, poetry, drama, and novels. The course spans works from the Anglo-Saxon times to the Modern era. The course emphasizes close reading and analysis of literature; it includes extensive work on analytical writing skills, development of oral communication skills both in small groups and with a larger audience, and mastery of vocabulary words. The year-long nature of the course provides time for students to receive individual help on their

writing and vocabulary study, both during class and in extra help sessions.

**\*EARLY BRITISH LITERATURE** (one semester) studies our English literary heritage from its origins in the seventh century through 1800. Students will see literature develop in relation to changes in society, culture, and the English language. Major works include the Medieval epic Beowulf, Geoffrey Chaucer's *Canterbury Tales*, a play by William Shakespeare, and Jane Austen's novel *Emma*. Writing assignments include analytical essays, poems, and satires. Students may take both Early British Literature and Modern British Literature but are not required to take both.

**\*KNOWING LAUGHTER: COMEDY IN BRITISH LITERATURE** (one semester) surveys comic literature from the Middle Ages to the modern world. The course will investigate different types of humor (situational comedy, irony, wit, comedy of manners, puns, etc.) in plays, poems, short stories, and novels. Students will write shorter responses, analytical essays, and imitations of the various authors and forms of comedy in the course. Working with essays by Aristotle, Sigmund Freud, Brian Boyd and others, students will create their own definitions of comedy and their own explanations for the causes and purposes of laughter.

**\*LITERATURE OF THE OCEAN** (one semester) looks at the ocean with reverence and wonder. We will examine the ocean's influence on both the literary imagination and human culture, reading the ocean as a metaphor, as a highway for ancient voyagers, as a source of life, as a vault for cultural memory, and as a nationless space that connects us all. Mainly navigating Hawaiian legends predating Western contact, we will also study poetry with origins in the Pacific, Atlantic and Caribbean. Students will contemplate their own relationship to the ocean as they interpret how characters in literature define and find themselves through the sea. Student writing consists of creative, analytical, and personal pieces, including a carefully crafted college essay. The final project asks students to revisit a work from the semester and expand on it through meaningful cultural and environmental connections in poetry, art, performance, documentation, and/or service.

**\*MEDIEVAL LITERATURE** (one semester) surveys major works of literature written from 700 to 1500. Readings include Beowulf, *Sir Gawain and the Green Knight*, and selections from the *Canterbury Tales*; battles against fearsome monsters, world-changing miracles, and adventures in love and marriage are only some of the

## ENGLISH (CONTINUED)

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treats that await within. Students will learn to understand literature as both a product and a powerful shaper of the cultures around it. They will also sharpen their skills in literary criticism, creative writing, and oral communication.

**\*SHAKESPEARE I** (one semester) studies the works of one of the world's greatest writers both as poetry and as living drama. Students write poems; compose personal, creative and analytical papers; design creative projects; and watch live and filmed performances. The reading includes examples of William Shakespeare's major genres: sonnet, history, comedy, and tragedy.

**\*SHAKESPEARE II** (one semester, prerequisite SHAKESPEARE I) allows students who have taken Shakespeare as juniors to return to their study of this famous playwright and poet, focusing on a more advanced approach to the analysis of a different set of plays and poems. Students will be expected to use their previous work with Shakespeare to facilitate class discussions, to provide extra support during paper critique sessions, and to increase the sophistication and breadth of their own analytical and creative work.

**\*WOMEN IN LITERATURE: AWAKENINGS** (one semester) As its subtitle reveals, this course will address the gendered "awakenings" of its subjects over time. Essential questions will reflect the issues of women both ancient and modern, noting common themes and concerns: Where have women been? Where are they now? Where are they going? The course will be rooted in pre 1900's literature by revolutionary authors such as Kate Chopin, Charlotte Perkins Gilman and Sor Juana Inés de la Cruz. Students will learn and apply various Gender Studies concepts and forge connections between classic women's literature and modern feminist thought. In addition to traditional texts, students will explore the world of women's art, music, and presence in media. Assessments will include formal literary analysis papers, creative visual projects, and oral presentations.

**\*WORLD LITERATURE** (one semester) is a world tour of literature written before 1900. All the works are major masterpieces, and most were not originally written in English. Students will learn about the art, music and history of other lands. Guest teachers will introduce students to foreign languages and cultures. Students will do personal, creative and analytical writing. The reading will include fiction by Voltaire, Mary Shelley, and Fyodor Dostoyevsky; plays by Sophocles and Henrik Ibsen; poetry from the Tang dynasty and the haiku masters; and selections from Virgil's Aeneid,

Miguel de Cervantes's Don Quixote, and the Fables of Jean de La Fontaine.

### POST-1900 LITERATURE

**\*ASIAN AMERICAN LITERATURE** (one semester) introduces to students the texts and contexts of Asian American authors. Students examine primary texts by representative authors like Maxine Hong Kingston, Hisaye Yamamoto, David Henry Hwang, and Carlos Bulosan. They also do close readings; examine a variety of ethnic groups; explore contexts; discuss literary criticism; and construct essays that address issues important to students, who comprise the next wave of citizen leaders. This course has a final examination.

**\*BRITISH LITERARY EXPERIENCE** (see description under pre-1900 literature)

**\*LATIN AMERICAN LITERATURE** (one semester) offers an immersion into the sensational and surprising world of Latin American literature. The course will begin with a discussion of literature in translation and a short creative translation project. We will study major Latin American authors and the literary movement of magical realism from the early twentieth century to present day. For each text, students will explore the relevant social, political and historical contexts of the setting in order to arrive at a more complete understanding of the literary work. Through the lens of literature, students will be challenged to think critically about the connections between race, class, gender, culture and identity in order to understand the evolving character of Latin America. Students will have the opportunity to demonstrate their learning through critical essays, creative writing, and oral presentations.

**\*LITERATURE AND FILM** (one semester) takes a critical look at powerful film adaptations of great literature. Students consider the novel, screenplay, and film as original texts for developing meaningful narratives between the written craft and the cinematic form. Authors include Haruki Murakami (summer reading), Susanna Kaysen, Stephen King, Su Tong, and Sofia Coppola. Assignments range from the personal to the analytical, from the written to the visual project. Additional time outside of class is an essential requirement for students to complete their creative film projects.

**\*LITERATURE OF HAWAII'I** (one semester) surveys the depiction of Hawai'i in various forms of literature from the early 1900s through the 2000s. The main

## ENGLISH (CONTINUED)

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focus of this course is to study how Hawai'i literature has formed and evolved due to the ever-changing political and cultural landscape of the islands. The course will be divided into four units of study with literature surrounding distinct historical events and eras: the annexation era, the plantation immigration experience, the Hawaiian Renaissance, and the contemporary 2000s era. Students will read a variety of genres ranging from songs, poems, and legends to essays, short stories, memoirs, and novels. These readings will examine issues surrounding identity, family, race, and culture, amongst others. Major assessments include analytical and creative writing pieces as well as oral presentations.

**\*LITERATURE OF SPORT** (one semester) focuses on challenging works about sports by a variety of writers, such as Homer, Walt Whitman, David Halberstam, A.E. Housman, John Updike, and more. Readings include essays, journalism, poetry, and books of non-fiction. Students write both analytical essays and personal essays. Projects, pertinent videos, guest speakers, and a field trip enhance the learning experience.

**\*MODERN BRITISH LITERATURE** (one semester) studies our English literary heritage from 1800 to the present. Students will see literature develop in relation to changes in society, culture, and the English language. Readings come from the age of Romanticism, the Victorian Period, the twentieth century, and modern multicultural Britain. Writing assignments include analytical and creative papers. Students may take both Early British Literature and Modern British Literature but are not required to take both.

**\*PHILOSOPHICAL LITERATURE** (one semester) focuses on fundamental questions about what makes a fulfilling, meaningful life. Students read works in which characters and authors grapple with these questions. In the past, the literature has included novels, short stories, poetry, essays, articles, and eastern and western philosophy from some of the world's greatest writers and thinkers, such as Somerset Maugham, William Wordsworth, Walt Whitman, Leo Tolstoy, Hermann Hesse, Friedrich Holderlin, Lao-tzu, Friedrich Nietzsche, Basho, Rene Descartes, Antoine de St. Exupery, and Immanuel Kant. Writing assignments consist of personal essays and creative writing.

**\*RACE AND SOCIAL JUSTICE LITERATURE** (one semester) critically investigates the various ways race is constructed and represented in American literature. From Vietnam war protests to social movements around

Hawaiian independence to #BlackLivesMatter and beyond, students will trace the long history of literature's ability to critique ideology, engender empathy and racial solidarity, and bolster social justice movements. Students will read widely across disciplines and genres—from sociology to oral histories, from critical philosophy to slam poetry—and from writers like Gloria Anzaldúa, James Baldwin, Kendrick Lamar, Viet Thanh Nguyen, and Claudia Rankine. Most importantly, we will write every week, exploring many different kinds of creative, personal, and academic writings.

**\*WAR IN THE 20TH CENTURY** (one semester) surveys military conflicts in the 20th century with an emphasis on World War I, World War II, and the Vietnam War. The course begins with a brief look at death and the nature of war. Various themes run through the course, including the effect of war on soldiers and civilians, the difference between perceptions about war and actual war, and the challenges of modern warfare to moral citizens.

### WRITING AND SPEECH

**ADVANCED SPEECH** (one semester) This is a public speaking course. You will study the written and oral devices used to advance an idea to inform or persuade others. You will practice oral and non-verbal skills through performances, group discussions, and debates. You will research, analyze, and advance positions on contemporary social issues. The course will not cover competitive speech and debate practices, but will prepare you for everyday public speaking situations.

**CREATIVE NON-FICTION WRITING** (one semester) uses a workshop approach to the creation of non-fiction writing. Students read published works to explore strategies for generating their own creative pieces, using such techniques as memory, investigation, imagination, research, observation, and reflection. They learn to consider audience, purpose, and selection of detail as they move through multiple drafts of each piece of writing. The course provides a supportive environment and teaches skills that apply to various rhetorical modes of non-fiction.

**CREATIVE WRITING** (one semester) allows students to discover and develop their written voices through the study and composition of poetry, fiction, and short dramas. Students gain an appreciation for the art and craft of creative writing by reading and responding to the creative efforts of professional and amateur writers. This student-centered course emphasizes experimentation

with both the writing process and potential products. Creative compositions will undergo significant revision and be included in the course portfolio.

**FINDING POETRY** (one semester) challenges students to find power in words. The course surveys classic poetry from well-known poets such as William Shakespeare, Samuel Taylor Coleridge, Walt Whitman, and Robert Frost, and acquaints students with more modern authors. Students will also be exposed to the poetry of Spoken Word artists Taylor Mali, G Yamazawa, Shane Koyczan and Sarah Kay. Students will practice uncovering meaning and writing intelligently about the pieces they study. Through frequent Poetry Challenges, the students will create their own ways to move people with their words.

## » ADVANCED PLACEMENT

### **\*ADVANCED PLACEMENT ENGLISH LITERATURE**

(full year, seniors only) is a college-level course for seniors which features rigorous study of fiction, drama and poetry. The course emphasizes analysis and interpretation, but students write personal and creative papers as well as analytical essays. The reading includes a variety of classic and contemporary works by American and English authors as well as works in translation. Major works include William Shakespeare's play Hamlet and novels by Fyodor Dostoyevsky, Charles Dickens, Toni Morrison, and Khaled Hosseini. Students will be well prepared for the AP exam and for college-level reading and writing.



# HEALTH EDUCATION

The Health curriculum is taught to all K-12 students in varying age- and course-appropriate formats. Students are encouraged to take responsibility for their own well-being and extend these concepts to their families and communities. Health education in the Upper School is formally introduced as Guidance 7 and Lifetime Health.

**GUIDANCE 7** is a 9-week course that will develop a healthy and positive sense of self through instruction, discussion, guest speakers, videos, and activities. The students will discuss and do activities which address how to be a cooperative and productive member in the classroom and community. The guidance component leads students through the topic areas of study skills, communication, digital citizenship, friendship, self-esteem, assertiveness, manners, and etiquette. The health component focuses on the physical and social emotional changes that occur during adolescence.

**LIFETIME HEALTH** is a semester course in which students will learn, develop, and practice skills that will promote and maintain one's personal health. The instructors will engage students in critical thinking skills by raising awareness through questioning, class discussion, activities, research, videos, guest speakers, and current events to explore current issues and current

health trends for adolescents. Students will be provided the opportunity to use application of health and fitness knowledge and skills in making healthy personal choices, informed decisions, and advocating for the health of others. The course topics will include the priority risk/content areas taken from national health standards, including: Injury Prevention/First Aid/CPR, Alcohol/Tobacco/Other Drugs, Sexual Health & Relationships, Nutrition and Physical Activity and Mental and Emotional Health. Students will spend approximately half of the course hours in the classroom and half of the course hours participating in physical fitness activities outside the classroom.



# HISTORY

The goal of the History Department is to provide 'Iolani students with a clear understanding of the past and present and to offer them opportunities to think critically about the major issues facing them in the future. To this end, the department emphasizes the study of history and geography and the improvement of reading, speaking, listening, and analytical writing skills.

**WORLD GEOGRAPHY** (Grade 7) provides students with a skill-based, comprehensive view of the world in which they live through the study of its physical and human composition. It presents a geographic perspective from which students gain a better awareness and knowledge of the earth and its peoples. The course emphasizes reading, writing, thinking, oral communication, and library, technology and map skills. Students engage in cooperative learning activities to promote socialization and collaborative scholarly work.

**SOCIAL STUDIES** (Grade 8) comprises a study of the history of the Hawaiian Islands and an introductory exploration of civics, economics and contemporary issues. Students develop their understanding of the course topics as well as historical writing and thinking

skills through a variety of activities, including reading, primary document analysis, simulations, research, debate, and civic engagement.

**HISTORY OF THE MODERN WORLD** (Grade 9) emphasizes political, social, cultural, and economic interactions among the world's peoples beginning in the Gunpowder Empires and concluding with an examination of recent events in our world. The course builds on writing and thinking skills learned in grade 8 and prepares students for a rigorous History curriculum in the upper grades.

**UNITED STATES HISTORY** (Grade 10) emphasizes a broad understanding of the nation's economic, political, social, diplomatic and cultural growth. Students learn the thinking



# HISTORY (CONTINUED)

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and writing skills of the historian: explanation of change over time and cause and effect, analysis of historical documents, recognition of different perspectives and the relationship between the past and present.

## » ELECTIVES FOR GRADES 11 AND 12

### FULL YEAR COURSE:

**ASIAN STUDIES** offers students a historical and cultural appreciation of China and Japan, the two dominant Asian countries, from prehistoric times to 1911-1912. They will also carefully examine the religions and philosophies of these ancient cultures, learn each country's geography and study numerous art slides from each time period. Throughout the course, they will write research papers, make oral presentations, and work in groups. These varied activities sharpen students' analytical abilities, improve writing skills and help them to form their own opinions and reach logical conclusions. Students usually participate in the National History Day program.

### SEMESTER COURSES:

**AFRICAN AMERICAN STUDIES** explores the African American experience and how that experience has been reflected in history and literature and the arts. Students survey some of the political, legal, social, cultural, and literary aspects of African American history, read a major novel, and examine a selection of poetry and short prose by prominent African Americans. Course assignments include essays on literary themes and historical problems, personal responses to the assigned readings, movie reviews, and a creative project.

**ANCIENT AND MEDIEVAL STUDIES** investigates early Western traditions. The course explores a variety of topics including the Greek city-states, the Roman Republic, the Roman Empire, Medieval Europe, and the Islamic kingdoms. Students will study the ideas, social structures, political systems, religious beliefs, and institutions that lead to the development of our modern Western society.

**ASIAN AMERICAN EXPERIENCE** surveys the history and experience of Asian Americans, tracing their roots back to pioneering migrants and progressing to today's complex communities. The early immigration and adaptation patterns of Chinese, Japanese, Filipino, Korean, and Southeast Asians in Hawai'i and American society at large are emphasized. Asian American experiences are, in many ways, common to the experiences of other people who venture to a new land, and serve as a way to improve

students' understanding and appreciation of America's ethnic and cultural diversity.

**CONTEMPORARY ISSUES IN AMERICA** explores current, national, state, and local news stories. In addition to learning about the historical context of today's issues, students also learn to examine the reliability and bias of various media sources. Discussions and papers help deepen and broaden students' knowledge of their world.

**ECONOMICS & ENTREPRENEURSHIP** teaches students how to create and manage their own business by fusing an entrepreneurial idea with a social purpose. The course begins with a survey of fundamental microeconomic principles and then moves to the study of successful business models that emphasize positive contributions to the community.

**GLOBAL POLITICS** begins with a study of the history, structure, and function of the international system. It explores the complexities of state sovereignty, the mutual responsibility of nation-states to set and uphold international standards, and the challenge of addressing global issues within existing international institutions. The course also evaluates the increasing role that non-state actors, from terrorist organizations to international NGOs, play in challenging the status quo, compelling world leaders to approach emerging crises differently. Students learn how to apply international relations theories to foreign policy by evaluating the actions of international organizations, states, and non-state actors using contemporary case studies.

**HISTORY OF AMERICAN SONG**, through American history and through music, covers various categories of American popular music including folk, country, Broadway, the blues, jazz, gospel, R&B, Hawaiian, Tejano, rock and hip hop with the aim of exploring their political, social, cultural, and geographical contexts. The course relies on music and performance as primary sources, but will also include readings on music. Students keep a listening journal, write short papers, and complete a research project that includes a digital and artistic component. Students emerge from the course with a deeper aesthetic sense that informs their own listening choices and enables them to decide for themselves what makes American popular music distinctive in all its permutations.

# HISTORY (CONTINUED)

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**HISTORY OF AMERICAN WOMEN** examines the first, second and third waves of American feminism, focusing on the changing role of women throughout American history. The first quarter is dedicated to the first women's movement from Abigail Adams to the passage of the Nineteenth Amendment to the Constitution, which granted women suffrage. The second quarter examines the birth of the second wave of American feminism through the changing role of women in the work place as well as the social revolution of the sixties. The course also touches upon the current status of women in American society. Projects focus on myriad perspectives, including, but not limited to the economic role of women and their professions, the legal rights of women, the role of women in politics, the influence of race and ethnicity in shaping notions of American womanhood, and the changing role of women in the American family.

**HISTORY OF HAWAII'** provides the students with a working knowledge of the geographic, political, cultural, social, and economic structure of the Hawaiian Islands. The entire history of the Hawaiian Islands is studied, with emphasis placed upon the period from 1778 to the present. After completion of the course, students have a better appreciation of their state and its relationship to the U.S. continent and the world.

**MICRO/ MACROECONOMICS** provides students with a broad economic perspective with a firm grounding in basic economic concepts. The students explore microeconomic principles involved in individual firm analysis, price determination, and market structures. In macroeconomics, students focus on inflation, unemployment, and gross domestic product in order to examine the influence of monetary and fiscal policy on our national economy. Throughout the course, students will learn to apply economic principles to decisions they make in their everyday lives.

**ORAL HISTORY: THEORY AND PRACTICE** allows students to take part in the history making process. By interviewing community members who lived through key events of the 20th century, students will document the stories of the everyday people whose voices are often left out of history books. Students will conduct, transcribe, and archive oral history interviews, thereby contributing new primary source material to the historical record. In lieu of a semester exam, students will use their interviews to produce short documentary films that share and preserve the stories of America's History. By participating in this course, students will engage in meaningful academic work, while simultaneously doing a great service for the community at-large.

**WAR IN THE 20TH CENTURY** surveys military conflicts in the 20th century with an emphasis on World War I, World War II, and the Vietnam War. The course begins with a brief look at death and the nature of war. Various themes run through the course including the effect of war on soldiers and civilians, the difference between perceptions about war and actual war, and the challenges of modern warfare to moral citizens.

## » HISTORY ADVANCED PLACEMENT

**AP UNITED STATES HISTORY** (Grade 10) examines the economic, political, constitutional, cultural, diplomatic, social and intellectual history of the United States from the pre-Columbian period to the present. In this writing intensive course, students develop the critical thinking skills of the historian and investigate historiographical debates in United States history. This is an accelerated course open to qualified sophomores, culminating with the Advanced Placement exam in May.

**AP COMPARATIVE GOVERNMENT AND POLITICS** (one semester, Grades 11 and 12) introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.

## **HISTORY** (CONTINUED)

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**AP EUROPEAN HISTORY** (Grades 11 and 12) covers the period from the Renaissance to the present, emphasizing the study of political, social, economic, and cultural roots of modern Europe. Students will also focus on developing analytical writing and primary source interpretation skills. The course is highly recommended for seniors who have demonstrated excellence in previous history courses.

**AP MICRO AND MACROECONOMICS** (Grades 12) requires students to understand the economic concepts in micro- and macroeconomics, and to integrate them with graphic analysis and current and past economic events. Microeconomics focuses on the decision-making of individuals and firms, including the concepts of opportunity cost, scarcity, supply and demand theory, elasticity, pricing in both the product and factor markets, businesses and their costs, and government's role in economic decision-making such as monopoly regulation, externalities, and taxation. Macroeconomics tackles economy-wide phenomena resulting from group decision making in entire markets. The macroeconomics component begins with business fluctuations and indexes, circular flow of income and monetary and fiscal policy contrasting Keynesian, monetarist, and supply-side economics. The course concludes with international trade, exchange rates and balance of payments.

**AP UNITED STATES GOVERNMENT AND POLITICS** (Grades 11 and 12) emphasizes current events rather than the material usually covered in history classes. Students begin the course with an in-depth discussion of the Constitution then move to the external forces that shape our government: states, public opinion, elections, interest groups, political parties and the media. The course next examines the three branches of government and how they attempt to work together. The final segment of the course looks at economic, social, environmental, military and foreign policy, as well as Supreme Court cases involving civil liberties and civil rights. This part of the course focuses on determining who has power in the United States and how that power is used. Students demonstrate their knowledge through exams, papers, group projects and simulations (Mock Congress, Supreme Court trials, and redrawing district lines for elections). The course is ideal for students who plan to go into journalism, law, business, public service or who have an interest in current events. The course is the equivalent of a college semester course in introductory American Government.



# iDEPARTMENT

The iDepartment, established with the opening of the Sullivan Center for Innovation and Leadership, supports elective experiential courses that focus on application of knowledge to solve real-world problems or to find creative solutions to problems. Courses are project-based and involve content and approaches from multiple or nontraditional disciplines. Students in these courses interact with related civil, global, or entrepreneurial communities using face-to-face or 21st century technologies.

**SEQUENCE 9** is a required semester course combining art (see Art 9), religion (see Religion 9) and an introduction to the iDepartment's FabLab. The goal of Sequence 9 is to give students the opportunity to explore activities in the arts, STEM and spiritual and ethical development. In the FabLab, students will be guided by iDepartment faculty in a hands-on, project based experience.

## COMPUTER SCIENCE

**AP COMPUTER SCIENCE PRINCIPLES** (Grades 11-12, full year) offers a multidisciplinary approach to learning the essential ideas of computer science. The course emphasizes the creative aspects of programming, abstractions, algorithms, the Internet, cyber security

while also exploring the societal impacts of computing. Students are exposed to a broad range of tools and use technology to address a real-world issue or develop a project for creative expression.

**APP DESIGN AND DEVELOPMENT** (Grades 10-12, one semester) teaches students the basics of application design and development while emphasizing creative problem-solving and collaboration. Over the semester students' programming skills will mature as they work on various challenges designed to culminate as an app to be presented to the computer science community. Prerequisites: Computer 1 or permission of instructor./May not repeat for credit.

## **iDEPARTMENT** (CONTINUED)

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**COMPUTER 1** (Grades 10-12, one semester) introduces to students the foundational concepts of computer science and computational thinking practices. With a focus on creative problem solving, students explore a variety of topics to create personally relevant artifacts. Prerequisites: None/May not repeat for credit.

**INTRODUCTION TO DATA SCIENCE** (Grades 10-12, one semester) is about turning questions into programs, applying code to data, and making meaning of results. This course will expose students to the field of data science with the purpose of providing fundamental skills to visualize and analyze data across disciplines. Through specific tutorials, labs, and projects, students will analyze data using multiple programming languages and methods, develop their inquisitive minds to ask questions, and transform data into knowledge.

**VIDEO GAME DESIGN 1** (Grades 7 and 8, one semester) takes students through an investigation of designing and programming video games. Students learn foundations in computer programming, graphic design, animation principles, brainstorming techniques, project management and teamwork. Prerequisites: None

**VIDEO GAME DESIGN 2** (Grades 8-9, one semester) guides students to produce and market a video game of their own design. The values of teamwork and contributions by all are reinforced. Students with skills and experience in art and design, computer programming, music, storytelling, game-playing, marketing and project management are encouraged to participate. Prerequisite: Video Game Design 1 or equivalent experience; May repeat for credit; May not be taken in the same school year as Video Game Design 1.

### DESIGN AND FABRICATION

**INTRODUCTION TO DIGITAL DESIGN AND FABRICATION** (Grades 7-8, one semester) introduces students to digital design and fabrication and excites them to the possibilities of these 21st century technologies in supporting their personal interests as well as current and future curricular projects. Students will learn 2D vector graphics software design and become familiar with the operation and capabilities of the laser cutter. Students will also learn 3D CAD and 3D fabrication using 3D printers. As all of the learning will be in the form of projects, students will also learn about project proposal, design, documentation, execution, and reflection. Prerequisites: None/May not repeat for credit.

**DESIGN AND FABRICATION 1 1** (Grades 9-12, one semester) enables students to learn the basics of CAD/CAM/3D printing through completion of a series of introductory Design Thinking lab/shop projects that allow them to actually experience the CAD/fabrication process from the initial design concept to the finished produced part. Students then apply the knowledge and skills developed through these activities to the completion of a major design project that incorporates the entire process from design to CAD to fabrication. This experiential approach encourages students to “learn by doing” and, thereby, develops the problem-solving and teamwork skills fundamental to industry practice in the fields of engineering and manufacturing. Prerequisites: None/May repeat for credit.

**DESIGN AND FABRICATION 2** (Grades 10-12, one semester) facilitates students' pursuit of more challenging projects using technologies covered in Design and Fabrication 1 as well as projects which require the exploration of new technologies and materials. Students may have the opportunity to act as manager on a student project, distributing tasks, monitoring team progress, and managing deadlines, and the opportunity exists for students to pursue complex individual/small team projects. Projects will be assigned by the instructor. Prerequisites: Design and Fabrication 1 and permission of instructor.

### MEDIA PRODUCTION

**FILM PRODUCTION** (Grades 10-12, one semester) explores different ways of bringing a creative work to life on screen. Through a series of hands-on film making projects, students gain insight into how to move an audience, build upon their vision, and express their creative voices effectively. Students gain experience in all aspects of production--from storyboarding, scripting and casting, to shooting, directing, and editing using professional-standard equipment and software. A fun, interactive, and eye-opening class with lessons that apply across many disciplines. This course is for aspiring filmmakers of all levels. Prerequisites: None/May repeat for credit.

**MULTI-MEDIA PRODUCTION IN SERVICE TO 'IOLANI** (Grades 9-12, one semester) introduces students to the digital arts and the inner workings of a design studio. Students will learn the digital software used for graphic, multimedia, and web design, including Photoshop, Illustrator and InDesign. Projects are designed to develop an understanding of the programs as they relate to design

theory, aesthetic appeal and functionality as students gain hands-on experience designing for and working with a client. Topics include vector and bitmap imaging for logo, shirt and other graphic applications, photo manipulation, typography, color, composition, page layout, multimedia editing, and other forms of fabrication relative to the digital visual arts workflow. Students document and use their newly acquired skill set to develop a portfolio of their creative works. Prerequisites: None/May be repeated for credit.

**NEWSROOM** (Grades 8-12, full year) takes the high standards and rich tradition of 'Iolani's 100-year old student newspaper into the fast-paced era of digital media. The way information is shared has changed dramatically in the last decade, and new platforms for communication continue to emerge and develop. Still, the principles of good storytelling hold true, and the practice of journalism teaches efficiency, productivity, accuracy, clarity of writing, and quick thinking. Students study different forms of journalism and write pieces for print, online and social media. Areas of study include generating story ideas, reporting, interviewing, photography, writing and copy editing, page layout design and social media. Students are challenged to imagine new ways of news-sourcing and storytelling that best serve their generation. Prerequisites: None/May repeat for credit (Gr. 8 only Counselor/English teacher approval)

**YEARBOOK** (Grades 9-12, full year) Produced for 'Iolani students, faculty, staff and alumni by 'Iolani students, Ka Mo'olelo o 'Iolani has been documenting the rich history of the school since 1922. Yearbook is a multidisciplinary course that brings together students with interests in design, graphics, journalism, leadership and photography. Students are charged with both individual and team responsibilities that collectively account for the production of over 450 hand-created pages. Students work in industry-standard design software including Adobe Photoshop, Illustrator and InDesign, conduct interviews and write stories that mark the milestones of the school year at 'Iolani. Students gain real-world experience communicating and working with peers, parents administration, teachers and staff to compile and tell the story of the 'Iolani School community. Prerequisites: Yearbook Adviser Approval; May be repeated for credit.

## ROBOTICS

**ROBOTICS 1** (Grades 7-12, one semester) is an introductory level course utilizing programming, sensors and project-based learning. Through a hands-on approach, students will delve into the fundamental principles of mechanical, electrical, and computer engineering. Students will be introduced to programming, building simple circuits and 3D modelling. As skills are developed, challenges become progressively more difficult, culminating in a final team project for which students design and develop a solution to a real world design problem. Students will be introduced to 3D printing, fabrication and the engineering design process. They will also build on the programming skills they learned at the start of the semester. The final project will culminate in a final design presentation of their work. Robotics 2 may only be taken in subsequent school year.

**ROBOTICS 2** (Grades 8-12, one semester) is a continuation of Robotics 1, covering topics in robot design and automated systems. Topics include the use of CAD and associated fabrication techniques, closed loop control algorithms, sensors, actuators, motor control, wireless remote control, and embedded software design (Arduino platform). Prerequisites: Robotics 1 (B+ or higher) and consent of the instructor. May not be taken in same school year.

**ROBOTICS 3** (Grades 9-12, full year) gives students who have successfully completed Robotics 2 the opportunity to further their engineering skills. Driven by customer requirements or student developed idea, and guided through independent research, students work in teams to design, fabricate, and test a robotics system that meets a specific need or unique application. Students have the flexibility to concentrate on a specific discipline within their project team, be it mechanical engineering, electrical engineering, or computer programming. The expected deliverable will be a reliably functioning robotic system with design-build documentation. Prerequisites: Robotics 2 (grade of B+ or higher) and consent of instructor

**ROBOTICS 4** (Grades 10-12, full year) will give students who have successfully completed Robotics 3 the opportunity to further their engineering skills through this advanced robotics course. Driven by customer requirements or student developed ideas, and guided through independent research, students will work in teams to design, fabricate, and test a robotics system that meets a specific need or unique application. Prerequisites: Robotics 3 (grade of B+ or higher) and consent of instructor.

# iDEPARTMENT (CONTINUED)

## LEADERSHIP AND SERVICE LEARNING

**ECONOMICS & ENTREPRENEURSHIP** Grades 11–12, one semester) teaches students how to create and manage their own business by fusing an entrepreneurial idea with a social purpose. The course begins with a survey of fundamental microeconomic principles and then moves to the study of successful business models that emphasize positive contributions to the community. This course is also listed as an elective in the History Department. Prerequisites: None/May not repeat for credit

**FOUNDATION OF LEADERSHIP & ETHICS** (Grade 10, one semester) uses a variety of resources including guest speakers, readings, film, and activities, to help students examine the many facets of being an effective leader. During the first quarter of study, students reflect on their strengths and weaknesses, learn time management and organization skills, and examine how character influences leadership. In the second quarter they study problem solving, mediation, conflict management, team-building, group dynamics, and communication. Prerequisites: None/May not repeat for credit

**MY LIFE, MY ISLAND, MY WORLD** (Grades 7–8, one semester) This course focuses on the skills students need to solve problems creatively: asking critical questions, thinking beyond current models, recognizing connections, creatively using technology, and working collaboratively to understand the challenges of our time and to deploy sustainable solutions. Through academic research, field-work and service-learning, this course will teach students to think critically about some of the most pressing and rapidly-evolving challenges we face. Students will also be challenged to view issues such as water rights in Hawai'i or local food systems from all perspectives. In the second half of the course, students will develop a service-learning project of their choice. In teams, they will use what they have learned along with appropriate technology to develop and implement sustainable solutions for a current challenges. Prerequisites: None/May repeat for credit.

**ONE MILE PROJECT** Grades 9–12, one semester) provides students with meaningful, real world experience by getting outside of 'Iolani, learning about real needs in our community, and creating solutions to those needs. Students begin the class by engaging in empathy challenges and off-campus visits with kupuna in our community. They continue by working together with classmates and community members to develop real solutions for the older adult population for their final project. Prerequisites: None/May not repeat for credit

## APPLIED SCIENCE RESEARCH

**WET LAB A** (Grades 10–12, one semester) Students develop or continue a research project that connects with Hawai'i, its people, environment, oceans, wildlife, or history. Students may be doing scientific research or engineering and design that supports the scientific research. Students prepare a research proposal and individual research protocols vary to fit each student's requirements. A tentative schedule will be established before actual research begins. This course prepares students for participation in the Science Fair in the spring. Since it is expected that the topics will vary tremendously, an interview of the student with the course teacher will be preliminary to the acceptance of each student into the program. Prerequisites: Interview with teacher; May repeat for credit.

## CAPSTONE COURSE

**ADVANCED INNOVATION AND LEADERSHIP PROJECT** (Grades 11–12, full year) is a capstone course for students who have demonstrated success and have acquired skills necessary for completion of a project of substantial innovation, challenge, and complexity. Students will acquire real-world experience in project development from project management to engineering (electrical, mechanical, computer science) to science research to communications. Planning of the project will begin in the Spring of the prior year when students who are interested in being part of the course express their intentions and begin work on the formulation of the project. A team of teachers/mentors will work with students on defining the parameters of the project. The project will address a need within the school or the community and will utilize the various skills developed by the iDepartment curriculum (electrical engineering, mechanical engineering, design and fabrication, computer science, science research, communications). Prerequisites: completion of Robotics 4 or App Design and Development or AP Computer Science Principles or a minimum of three semesters from Make It 101, Multi-media Production and Design and Fabrication 1 and 2. Instructor approval also required. May repeat for credit.

# IDEPARTMENT (CONTINUED)

## COURSE SEQUENCE

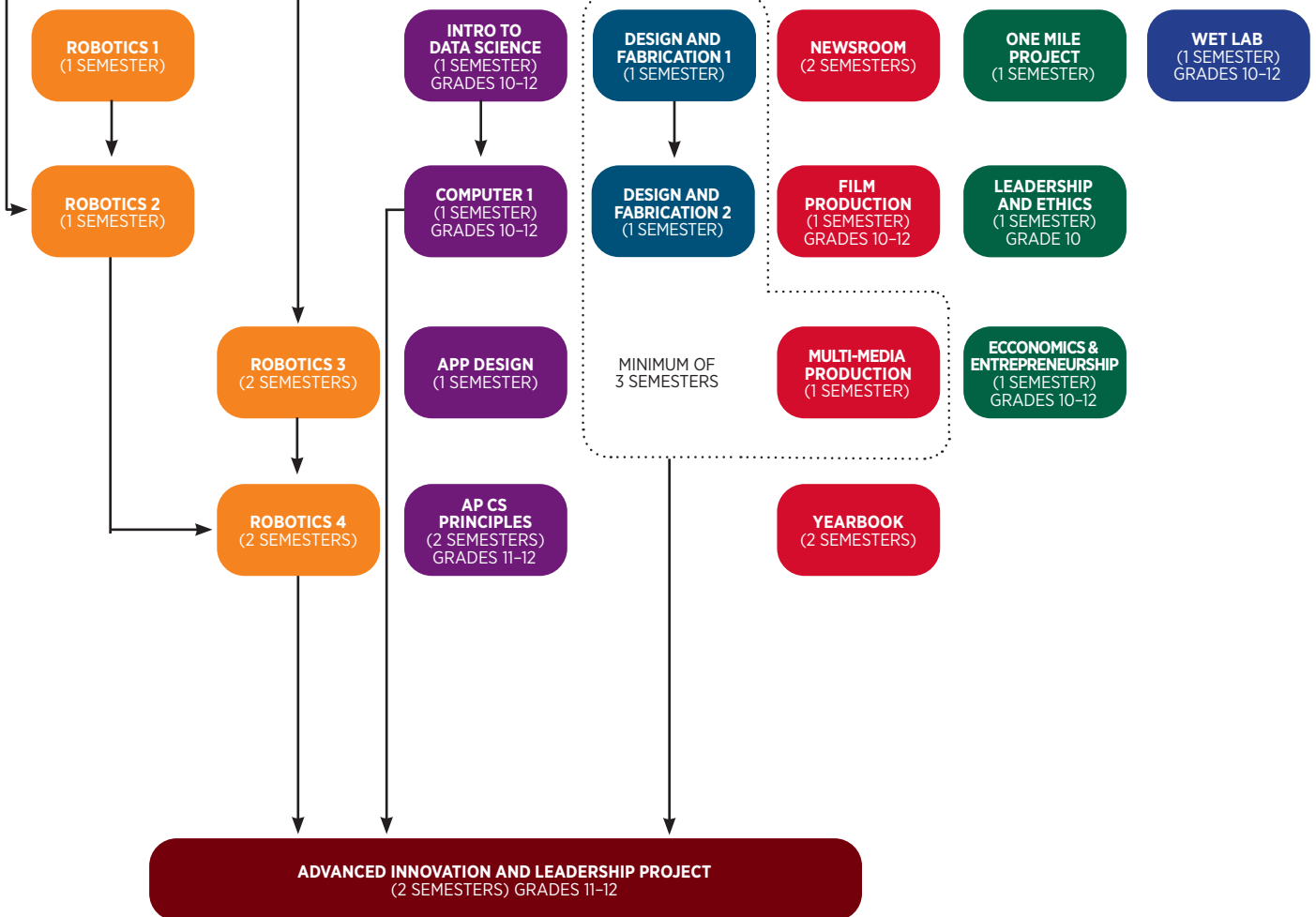
### GRADE 7



### GRADE 8



### GRADES 9-12







# MATHEMATICS

‘Iolani’s mathematics curriculum is both traditional and innovative. The basic skills of arithmetic, algebra, geometry, and trigonometry are emphasized, and current technologies are integrated throughout Grades 7–12. All students must satisfactorily complete Algebra 2 to graduate and must take mathematics through their junior year. An honors program is available for those exceptionally gifted in mathematics, and Advanced Placement Calculus is usually elected by those who have completed Precalculus as juniors.

**PRE-ALGEBRA** (Grade 7) introduces topics in statistics, probability, measurement, real numbers, geometry, algebra, and number theory. Students learn problem-solving techniques, and their arithmetic skills are reinforced within each topic.

**ALGEBRA 1** (Grades 8–9) teaches students how to perform fundamental operations with real numbers and with variables, and includes the usual algebraic manipulations: factoring, powers and roots, polynomials and fractional expressions. Students gain experience in solving and graphing linear and nonlinear equations and inequalities. Students apply their algebraic skills in traditional and nontraditional contexts.

**GEOMETRY** (Grades 9–10) treats Euclid’s work with congruence, similarity, parallelism, perpendicularity, areas, volumes, and circles. Plane and solid concepts are learned as an integrated subject through simple transformations. Symmetry is a conceptual strand that appears throughout the course.

**ALGEBRA 2** (Grades 10–11) begins with a review and extension of the basic skills learned in Algebra 1. The concepts of functions, composition of functions, and inverse of functions are thoroughly developed. These concepts are then used in the study of polynomial, rational, exponential, and logarithmic function. Analytic geometry in general and conic sections in particular

# MATHEMATICS (CONTINUED)

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receive emphasis. Also included are sequences and series. A graphing calculator is required.

**TRIGONOMETRY** (Grades 11-12, one semester) follows completion of Algebra 2. Emphasis is placed upon proving identities and solving equations involving all six trigonometric functions and their inverses. Problems that lead to trigonometric solutions are incorporated. Students examine graphs of the trigonometric functions and are introduced to polar coordinates as a significant graphical application. A graphing calculator is required.

**PRECALCULUS** (Grades 11-12, full year) prepares students for calculus and introduces them to concepts of higher mathematics. Topics include algebraic and transcendental functions, trigonometry, non-Cartesian coordinate systems, parametric equations, matrices, determinants, sequences, series, combinatorics, probability, and an introduction to limits. A graphing calculator is required. Algebra 2 Honors or Trigonometry is a prerequisite for this course.

## ELECTIVES FOR GRADES 11 AND 12

**DESIGN SCIENCE** (Grades 11-12, one semester) focuses on the study of symmetry from various scientific disciplines—chemistry, physics, biology, geology, and mathematics. Investigations in a problem-solving intense laboratory setting concentrate on the classical study and contemporary applications of symmetry. Topics include the study of affine transformations, chirality, polygonal symmetry, molecular symmetry, antisymmetry, frieze patterns, planar symmetry groups, elementary convex sets, phyllotaxis, stereographic projections, space packing, crystallography, and quasicrystals. Algebra 2 is a prerequisite for this course.

**ECONOMICS OF PERSONAL FINANCE** (Grade 12, one semester) provides practical knowledge and experience in personal finance, emphasizing investment decisions and strategies with focus on the time value of money concept. Money management skills are stressed as students research alternatives and make financial decisions in purchasing, borrowing, saving, risk management, and investments such as stocks, bonds, and real estate. Financial records such as a check register, savings passbook, and balance sheet are required. The effect of income taxes on investments is also stressed, and each student prepares a 1040 tax return.

**STATISTICS** (Grades 11-12, one semester) introduces students to the rudiments of data analysis, including the interpretation of statistical measures and graphical plots. The study of probability and descriptive statistics is a precursor to the examination of probability distributions and inference techniques. Also covered are the Central Limit Theorem, correlation and regression. Algebra 2 is a prerequisite for this course.

**MULTI VARIABLE CALCULUS AND ORDINARY DIFFERENTIAL EQUATIONS** is a semester course offered to students who have successfully completed AP Calculus BC. This is an extremely challenging course which requires a deep understanding of AP Calculus BC topics. Multi Variable Calculus covers partial derivatives, gradients, double and triple integrals, and line and surface integrals. Ordinary Differential Equations covers first and second order differential equations, series solutions, Laplace transforms, and numerical methods.

## » ADVANCED PLACEMENT

**AP CALCULUS AB AND AP CALCULUS BC** (Grades 11-12, one year) are offered to students who have successfully completed Precalculus. These courses are intended to be challenging and demanding, and they require a similar depth of understanding of common topics. Both courses cover differential and integral calculus of elementary functions of a single variable. In addition, Calculus BC covers the calculus of parametric, polar and vector functions, and infinite sequences and series.

**AP STATISTICS** (Grades 10-12, one year) introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students observe patterns using both graphical and numerical techniques and form models from which inferences can be drawn. Probabilities of random events, probability distributions of random variables, and sampling distributions of statistics are studied. The graphing calculator and computer play an integral role in data analysis as well as in facilitating simulations. AP Statistics may be taken concurrently with other mathematics courses. Algebra 2 Honors or Trigonometry is a prerequisite for this course.



## PERFORMING ARTS

‘Iolani School’s Performing Arts Department provides opportunities for students to excel artistically with courses in band, chorus, dance, hula, orchestra, stage band, musical theatre and theatre. In addition to presenting performances for the school and the greater Honolulu community, our ensembles travel for performances on the mainland and abroad. Some courses may be repeated for credit. A fall play and a spring musical are presented each year and auditions are open to all students in the Upper School.

In addition, ‘Iolani Special Programs offers after-school classes in dance and private lessons in voice, piano, wind, percussion and string instruments.

Piano students may join a performing group with the instructor’s permission. Generally, piano students will learn to play another instrument appropriate to the ensemble in which they are enrolled, and have opportunities to improve their piano skills by playing accompaniment parts in band and orchestra ensembles. Students may also choose to participate in stage band fundamentals, one of the three stage bands or, when they are seniors, audition for the ‘Iolani Orchestra Concerto concert.

*All Performing Arts courses are year long.*

*Students have performance requirements during the school year for all Performing Arts classes except the Grade 7 Sequence course, Stage Band Rhythm Section Fundamentals and AP Music Theory.*

## PERFORMING ARTS (CONTINUED)

### CHORUS

**CHORUS 1 S/A** (Grades 7-12, sopranos and altos) studies a variety of standard choral works, including major works, occasionally with orchestra. This course may be repeated for credit.

**CHORUS 1 T/B** (Grades 7-12, tenors and basses) studies the same pieces as Chorus 1 S/A, but for tenor and bass voices. This course may be repeated for credit.

**CHORUS 2/HOKULOLOA SINGERS** (Grades 7-12 open to students by audition) allows students to study advanced choral works and perform regularly in school and at various venues around O'ahu. This course may be repeated for credit.

### BAND

**BEGINNING BAND** (Grades 7-12) provides basic instruction for each instrument. The class is divided into smaller groups once a week for more individualized instruction. The elements of music are explained and explored, moving from unison materials to band arrangements and compositions. Students develop sight-reading skills, are introduced to small ensemble playing, and perform in two concerts annually. Selected students participate in the Oahu Seventh Grade Honor Band.

**INTERMEDIATE BAND** (Grades 7-12) explores more complex musical elements such as range and technique building exercises and the development of form, style, and performance practices. Students are introduced to playing music in independent parts and seeing the relationship of individual sections to the whole band. Development of solo and ensemble skills through participation in mini-recitals as well as the Oahu Band Directors Association Solo and Ensemble festival; participation in band concerts, and additional performing and auditioning experience through participation in the Oahu Band Directors Association's Eighth Grade Select and Honor Bands and the Parade of Seventh and Eighth Grade Bands. Selected students will also have the opportunity to perform with Orchestra 3. Prerequisite: consent of instructor.

**MARCHING BAND** (Grades 9-12, first semester) focuses on the theme of the field show for the season which determines the musical content of the course. Students are required to memorize music prior to performance, and attendance at Marching Band camp is mandatory. Field show music will be supplemented with pep charts

for use in the stands at football games and, toward the end of the semester, concert band literature will be studied. Development of leadership skills through student-conducted sectional and small ensemble rehearsals will also be stressed. Depending on the needs of Orchestra 5, certain wind and percussion players are selected to perform standard orchestral literature. Students have the option to enroll in Concert Band as an additional elective for the first semester or, if their schedule allows, to rehearse during the school day with the Concert Band (by consent of the instructor). Students registering for Marching Band are required to register for either Symphonic Band or Wind Ensemble in the second semester. Prerequisite: consent of instructor.

**CONCERT BAND** (Grades 7-12, first semester) students to continue to explore complex rhythms and keys; scales, arpeggios and range building exercises; and further study of form, style and performance practices. Leadership skills are developed through student-conducted sectional and small ensemble rehearsals. Depending on the needs of the orchestra classes for wind and percussion instruments, students are selected to perform with the orchestra at their skill level. Students have the option to participate in Marching Band by either enrolling in Marching Band as an additional elective for the first semester, or, if their schedule allows, to rehearse during the school day with the Marching Band (unregistered, by the consent of the instructor). Students also have the option to participate in pep band, and/or the percussion ensemble, both extra-curricular groups. Requires consent of the instructor. Students registering for Concert Band are required to register for either Symphonic Band or Wind Ensemble in the second semester.

**SYMPHONIC BAND** (Grades 9-12, second semester) allows students to continue exploration of more complex rhythms and keys; scales, arpeggios and range building exercises; further study of form, style and performance practices. Leadership skills are developed through student-conducted sectional and small ensemble rehearsals. Depending on the needs of the orchestra classes for wind and percussion instruments, students are selected to perform with the orchestra that is at their skill level. Students registered for Symphonic Band in the 2nd semester must be enrolled in either Concert or Marching Band during the 1st semester. Students have the option to participate in pep band, and/or the percussion ensemble, both extra-curricular groups. Prerequisite: consent of instructor.

## PERFORMING ARTS (CONTINUED)

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**WIND ENSEMBLE** (Grades 7-12, second semester) continues exploration of all styles of music from various periods in music history, and emphasizes deeper analysis of the expressive qualities of music and how the composer/arranger manipulates these elements. Development of leadership skills through student-conducted sectional and small ensemble rehearsals is stressed. Depending on the needs of orchestra 5, certain wind and percussion players are selected to perform standard orchestral literature. Students registered for Wind Ensemble in the 2nd semester must be enrolled in either Concert or Marching Band during the 1st semester. Students have the option to participate in pep band, and/or the percussion ensemble, both extra-curricular groups. Prerequisite: consent of instructor.

**STAGE BAND RHYTHM SECTION FUNDAMENTALS** (Grades 7-10) introduces techniques necessary for successful performance in a stage band setting, and is open to students with experience on guitar, piano, bass, or drum set. Students apply fundamentals through practice on different music styles and ensemble rehearsal of selected music pieces. This course may not be repeated for credit. Prerequisite: consent of instructor.

**STAGE BAND 1** (Grades 7-12) concentrates on beginning techniques and the basics of improvisation for students with experience in saxophone, trumpet, trombone, guitar, bass, drum set or piano. A variety of styles are studied and performed, including jazz, Latin, and rock. The course concentrates on beginning techniques and the basics of improvisation. Performances are scheduled throughout the year and participation by every member is required. This course may be repeated for credit. Prerequisite: consent of instructor required.

**STAGE BAND 2** (Grades 8-12) continues from Stage Band 1 and emphasizes performance, intermediate techniques, and improvisation. Prerequisite: consent of instructor.

**STAGE BAND 3** (Grades 8-12) continues from Stage Band 2, and emphasizes performance, advanced techniques, and improvisation. This course may be repeated for credit. Prerequisite: consent of instructor.

### ORCHESTRA

**ORCHESTRA 1** (Grades 7-12) is open to any student who wishes to learn to play an orchestral string instrument (violin, viola, cello or double bass). Proper playing posture, fingerboard geography, scales and arpeggios,

and basic music reading skills are established. Students get more individual attention in this smaller class and progress quickly.

**ORCHESTRA 2** (Grades 7-12) is open to students who have satisfactorily completed at least one year or more of string instruction. Linear and lateral knowledge of the fingerboard, playing in higher positions, shifting and vibrato, bow flexibility, and music reading accuracy are studied. This class may be repeated for credit. Prerequisite: consent of instructor.

**ORCHESTRA 3** (Grades 7-12) is open to students by audition. Shifting, vibrato, and advanced bowing skills are developed as preparation for membership in the two top orchestras. Intermediate orchestral literature is studied, and wind and percussion players are added to form a symphonic orchestra. Students are strongly encouraged to take private lessons for the development of an advanced level of instrumental technique; almost all students advanced enough to be eventually placed in Symphonic Orchestra 5 have been studying privately for most of their playing years. This class may be repeated for credit. Prerequisite: consent of instructor.

**ORCHESTRA 4** (Grades 7-12) is open to students by audition. More complex orchestral literature, technique and musicianship are studied. Wind and percussion players are added to complete the instrumentation needs of a symphonic orchestra. Students are strongly encouraged to take private lessons for the development of an advanced level of instrumental technique; almost all students advanced enough to be eventually placed in Symphonic Orchestra 5 have been studying privately for most of their playing years. This class may be repeated for credit. Prerequisite: consent of instructor.

**SYMPHONIC ORCHESTRA 5** (Grades 7-12) is a nationally recognized orchestra. Membership is by audition and is very selective. The emphasis is on performance of standard works in the orchestral literature. Symphonic Orchestra 5 plays three to four concerts per year, including the annual Concerto Concert. Almost all students in this class have been studying privately for most of their playing years. Wind and percussion players are added to complete the instrumentation needs of a symphonic orchestra. This class may be repeated for credit. Prerequisite: consent of instructor.

# PERFORMING ARTS (CONTINUED)

## DANCE

### HULA - WAHINE AND KĀNE

*'Iolani's Hula program includes separate courses for girls (Wahine) and boys (Kāne). Students in both sections learn both hula kahiko and hula 'auana, chanting, and will acquire an understanding of Hawaiian culture through the art of hula. All Dance-Hula courses are year-long.*

#### **DANCE 1 HULA WAHINE** (Grades 7-12 girls)

#### **DANCE 1 HULA KANE** (Grades 7-12 boys)

Students learn the fundamentals of both ancient and modern hula and focus is given to style and execution of movement within a cultural context. In addition to the required performance at the end of each semester, additional performance opportunities are offered on a volunteer basis. This course may be repeated for credit. There is no prerequisite for this course.

#### **DANCE 2 HULA WAHINE** (Grades 7-12 girls)

#### **DANCE 2 HULA KANE** (Grades 7-12 boys)

Building on the skills gained in Dance 1 Hula, students continue to develop hula technique and style, including an introduction to the art of chanting. In addition to the required performance at the end of each semester, additional performance opportunities are offered on a volunteer basis. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 1 Hula or instructor's consent

#### **DANCE 3 HULA WAHINE** (Grades 7-12 girls)

#### **DANCE 3 HULA KANE** (Grades 7-12 boys)

Building on the skills gained in Dance 2 Hula, students continue to develop technique, style and skill in chanting. Students learn about Hawaiian culture and hula culture through an exploration of hula implements. In addition to the required performance at the end of each semester, additional performance opportunities are offered on a volunteer basis. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 2 Hula and/or instructor's consent.

#### **DANCE 4 HULA WAHINE** (Grades 7-12 girls)

#### **DANCE 4 HULA KANE** (Grades 7-12 boys)

Dance 4 Hula allows students to delve deeper into the art of hula. In this advanced level course, students will further develop proper etiquette and technique in hula kahiko and hula 'auana. Attention will be given to understanding the kaona (or hidden meaning) of a mele. In addition to the required performance at the end of each semester, additional performance opportunities

are offered on a volunteer basis. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 3 Hula and/or instructor's consent.

### JAZZ/BALLET

*'Iolani's Jazz/Ballet program offers students opportunities to develop classical jazz and ballet technique and to learn the principles of stagecraft, etiquette, and ensemble dancing that are central to Western dance tradition. All Dance-Jazz/Ballet courses are year-long. There is a required final performance at the end of each semester and courses may be repeated for credit. Prerequisite courses and/or the instructor's consent determine student placement.*

#### **DANCE 1 JAZZ/BALLET** (Grades 7-12 boys and girls)

In the process of learning the fundamentals of jazz and ballet dance, students develop a foundational movement vocabulary and develop skills of timing, coordination and sequence recall. This course may be repeated for credit. There are no prerequisites for this course.

#### **DANCE 2 JAZZ/BALLET** (Grades 7-12 boys and girls)

Building on the skills gained in Dance 1 Jazz/Ballet, students begin to develop basic skills in showmanship and rehearsal/performance etiquette. Students also begin to develop a personal dance aesthetic which is integrated into choreography. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 1 Jazz/Ballet and/or instructor's consent.

#### **DANCE 3 JAZZ/BALLET** (Grades 7-12 boys and girls)

Building on the skills gained in Dance 2 Jazz/Ballet, students continue to develop their personal dance aesthetic. This course challenges students to polish their skills and to use their own creative ideas to create and perform their own choreographed pieces. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 2 Jazz/Ballet and/or instructor's consent.

**DANCE 4 JAZZ/BALLET** this course is an advanced-level, performance-oriented class that requires mastery of jazz and ballet technique. Students must be proficient in both styles of dance, and through choreography projects and performance, develop their own sense of movement, aesthetic and artistry. This course may be repeated for credit. Prerequisite: satisfactory completion of Dance 3 Jazz/Ballet and/or instructor's consent.

# PERFORMING ARTS (CONTINUED)

## THEATRE

**MUSICAL THEATRE I** (Grades 7-9) is an introductory course exploring the fundamentals of song analysis technique in the preparation of musical theatre repertory for performance. Emphasis is on vocal development through ensemble singing and dance skills through choreographed group numbers. Basic music skills and singing ability are highly recommended. The course culminates in a public performance at the end of each semester. Students may repeat the course.

**MUSICAL THEATRE II** (Grades 9-11) is an intermediate level course that prepares students with musical theatre repertory for public performance, with emphasis on the application of the tools acquired in Musical Theatre I. Students explore various forms of dance, build acting skills, work to expand vocal range, develop musicianship, and research musical theatre history. Students have multiple performance requirements throughout the year, including a public performance at the end of each semester. Students may repeat the course. Prerequisite: Musical Theatre I and/or consent of instructor.

**MUSICAL THEATRE III** (Grades 10-12) is an advanced level course designed as a college preparatory workshop and further develops skills acquired in Musical Theatre I and II. Through engagement in rotating six-week modules, students will refine their skills as singers, dancers, and actors in addition to developing skills in self-marketing, business, and audition technique. Students will also engage in an in-depth research project on the American Musical Theatre. Students have multiple performance requirements throughout the year, including a public performance at the end of each semester. This course may be repeated for credit. Prerequisite: Musical Theatre II and/or the consent of the instructor.

**BEGINNING THEATRE** (Grades 7-9) introduces the world of theatre covering both on and off-stage aspects through hands-on activities. Seventh grade students taking this class must repeat it as eighth graders before advancing to Intermediate Theatre. Eighth graders may advance to Intermediate Theatre in ninth grade with the instructor's consent. Ninth graders must advance to Intermediate Theatre as tenth graders.

**INTERMEDIATE THEATRE** (Grades 9-10) develops the acting techniques and styles learned by students in Beginning Theatre. Students expand Improvisation skills, develop original scripts, and learn about acting techniques currently used in theatre, film, and television. This course may be repeated for credit. Prerequisite: Beginning Theatre and/or consent of instructor.

**ADVANCED THEATRE** (Grades 11-12) combines workshop and seminar approaches. Students learn the basics of both writing and directing, with the goal of producing either original or published pieces at the end of each semester. As this is the highest level of theatre being offered, students may repeat this course for credit. Prerequisite: Intermediate Theatre and/or consent of the instructor.

## » ADVANCED PLACEMENT

**AP MUSIC THEORY** (Grades 11-12) is a college level course designed to help students learn to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Students will develop their aural, sight-singing, written, compositional and analytical skills through a wide variety of exercises. This course may be of particular interest for students interested in careers in music, music engineering, theater and film. Pre-requisite: Approval of the instructor.



# PHYSICAL EDUCATION

‘Iolani School provides a complete physical education program for boys and girls in all grades. The Physical Education department seeks to emphasize the importance of an active lifestyle as well as the One Team ethos. Students are exposed to a variety of physical activities in a setting that encourages sportsmanship, respect, teamwork, and active participation.

In grades 7-12, our Physical Education curriculum includes student participation in aquatic activities and individual as well as team sports that encourage a lifetime of physical activity. The department provides an enjoyable, educational experience exposing each student to a variety of physical activities geared toward an active, physically fit life. Upper School students must provide their own PE uniforms. Uniforms consist of any colored t-shirt with any ‘Iolani logo or a plain white, red, black or gray t-shirt and black, red, white, gray or pink athletic shorts. Athletic shoes with socks must also be worn to class.

**GRADE 7** — One quarter of PE is required, consisting of activity units with no exemptions for sports participation.

**GRADE 8** — One semester of PE is required, consisting of activity units and biathlon training with no exemptions for sports participation.

**GRADE 9** — *Please refer to Lifetime Health 9 in the Health Education section of this catalog.*

**GRADE 10 AND 11** — Two quarters of PE are required, consisting of lifetime activities. Students participating in two ILH sports during the year will be exempt from both quarters of PE. Students participating in an ILH sport simultaneously with their PE class must participate on game days.

**GRADE 12** — PE is not required. Students may take it as an elective.



## PHYSICAL EDUCATION (CONTINUED)

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Students are graded on class participation. Students who miss more than three class days are required to make up those classes. Students who miss more than six class days will be dropped from the class and be required to re-schedule the class. Students who do not complete their commitment to a given sport will not receive participation credit toward their physical education requirement.

### **VARSITY PE CONDITIONING**

This course is designed to provide athletes with the conditioning most do not get during the sports season due to the limited practice/contact time allowed. This course includes maintenance weight training, core training, flexibility exercises, cardio activities, aquatic activities, and rehabilitation to provide varsity athletes with the adequate weight and core training necessary for strength maintenance and injury prevention.

Students will be assessed on individual goals set by each student and the teacher with guidance and input from Coach Dominic Ahuna and the athletic coach. Heavy emphasis will be put on the student's effort, participation and attitude.

### **INTRAMURALS**

In addition to the required physical education program, various intramural activities are available. The Lower School PE department offers after school intramurals for grades 4-6. The Student Activities Office organizes lunch time activities for grades 7-12. Both programs emphasize school spirit and friendly competition between classes.



# RELIGION

The Religion Department offers students an opportunity to gain insight into the world's religions with a particular focus on the Christian tradition as expressed through the Episcopal Church. The study of religion involves the formation of both mind and heart. The Religion Department faculty approach religious education as an academic pursuit as well as an opportunity for self-examination, spiritual and ethical formation, and inspiration for faith-based service in the world.

Required religion courses provide a solid academic foundation in comparative religions, and the study of the Bible and other sacred texts. These courses also encourage students to develop moral and ethical decision-making skills that align with their personal and familial values.

Each course is independent and there are no pre-requisites. Students are not required to have any prior knowledge of the Bible, Christianity, or other faith traditions to enroll in any of these courses.

'Iolani remains rooted in its Christian faith and the heritage of the Episcopal Church. At the same time, 'Iolani recognizes, respects, and welcomes the diversity

of beliefs and traditions that reflect our modern society and enhance our community of learning. Weekly Chapel attendance is an important part of the 'Iolani experience for all students. Though not a formal part of the Religion Department curriculum, Chapel is an extension of the classroom and an opportunity for students to gather together for worship, meditation, prayer, and reflection. Chapel also provides a forum for students to hear from guest speakers, address community issues and topics, and enrich their faith and life together.

**WORLD RELIGIONS** (Grade 8) is part of a required sequence of courses. It introduces students to religions that have impacted world history and culture. The major world religions of both the East and the West, as well as

## RELIGION (CONTINUED)

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primal religious traditions, are explored. The Christianity unit gives students a foundation for their future studies in values, ethics, and the Bible.

**RELIGION 9** (Grade 9) is part of a one-semester required sequence of courses. In the religion rotation, students will be exploring basic Bible literacy. Over 6 weeks, they will be introduced to some of the iconic stories and characters of the Judeo-Christian Bible that are also fundamental to better understanding Western civilization's history, literature, and the arts. Students will also reflect on these stories and characters through various themes related to the human experience at large; themes for the course include faith, forgiveness, redemption, separation and reconciliation.

**BIBLE** (Grades 10-12) is a required course that examines Biblical texts from an academic perspective. Students explore the concepts of Biblical composition and historical criticism, including current scholarship regarding the historical Jesus. The Bible and related readings provide the basis for class discussions, writing assignments, tests and projects.



## SCIENCE

Derived from the Latin word *scientia* (“knowledge”), SCIENCE is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the natural world. Scientists understand the natural world through systematic observation, measurement, and experiment. The ‘Iolani Science program strives to impart to students a love of science, an understanding of key scientific concepts, and the tools to become scientifically literate citizens of the 21st century. Each ‘Iolani science course involves substantial laboratory work as students perform experiments, write their observations, and come to their own conclusions.

The ‘Iolani Upper School Science Program begins its science exploration for all students with Earth Science in seventh grade and Physical Science in eighth grade. With these first two levels of science, Life Science is integrated within the curricula to connect and extend physical science principles to living organisms. In grade 9, students begin their three-year science graduation requirement with a course in biology (Biology or Biology Honors). Grade 10 students matriculate to a course in chemistry (Chemistry or Chemistry Honors). Advanced Placement electives begin in the tenth grade with AP Biology, which, if selected in the 10th grade, must be

taken concurrently with Chemistry Honors. In grade 11, students may take physics (with offerings in Physics, AP Physics 1, AP Physics 2), AP Biology, AP Chemistry, or another science elective. With chemistry teacher approval, AP Physics 1 & 2 may be taken concurrently. It is highly recommended that students take a fourth year of science in consideration of high school science prerequisites for admission into some colleges. Thus in grade 12, students have the option to take any AP Science course (AP Biology, AP Chemistry, AP Physics 1, AP Physics 2, or AP Physics C) or science electives. Science semester electives are offered to enhance or reinforce science skills.

## SCIENCE (CONTINUED)

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**SCIENCE 7** (Grade 7) allows students to investigate scientific problems while participating in hands-on activities. Activities develop skills in making hypotheses, collecting data, and interpreting results. Students apply those skills while investigating Earth science topics including geology, meteorology, and oceanography. Students investigate natural hazards and are introduced to life science topics while studying soil, reefs, fossils and ancient environments.

**SCIENCE 8** (Grade 8) encourages reasoning skills and builds understanding of basic principles of the energy systems in the physical sciences through activities, lab experiments and projects. Students use a variety of technology and equipment in their study of force, motion, energy, work, electricity, waves, and matter. Life science is also integrated as applicable to the various topics.

**BIOLOGY** (Grade 9) is a lab-based course that surveys molecular and organismal biology. The course strives to teach biology in its evolutionary aspects and to foster an appreciation for the interrelationships of all living forms. Biological concepts, scientific method, and inquiry-based learning are emphasized. Thematic units include cell biology, genetics, evolution, and ecology. The course challenges students to understand basic biological concepts and to solve problems through class discussions, collaborative group projects, laboratory investigations, research and analytical writing.

**CHEMISTRY** (Grade 10) presents a broad chemistry program suitable for college-bound students. It provides a solid background in chemical fundamentals. Students are challenged on the conceptual as well as the quantitative level with material ranging from the abstract to the concrete. The course provides a solid foundation for college chemistry.

**PHYSICS** (Grades 11-12) emphasizes the development of the concepts of physics within a laboratory and project-based framework. Students practice the skills of data collection and analysis, then use their lab results to solve a wider range of problems. Topics covered include mechanics, electricity and magnetism. Physics serves as a conceptual base for science and non-science-oriented students. It encourages both groups to view nature more perceptively. For the science-oriented student, it serves as a springboard to a greater involvement in the sciences.

### » HONORS

**BIOLOGY HONORS** (Grade 9) is a lab-based course that surveys molecular and organismal biology in greater breadth and depth than Biology; consequently the pace is more rapid. Students choosing this course should have well-developed study and time-management skills. The course is designed to teach biology in its evolutionary aspects and to promote an appreciation for the interrelationships of all living forms. Biological concepts, scientific method, and inquiry-based learning are emphasized. Thematic units include cell biology, genetics, evolution and diversity, ecology, and plant and animal structure and function. Students in Biology Honors engage in class discussions, collaborative group projects, laboratory investigations, research, and analytical writing. The comprehensive nature of the course prepares the student to take the SAT Subject Test in Biology. Prerequisite: Teacher recommendation

**CHEMISTRY HONORS** (Grade 10) is a comprehensive study of chemistry that includes topics such as structure of matter, states of matter, reaction types, stoichiometry, kinetics, equilibrium, thermodynamics, oxidation-reduction reactions, electrochemistry, acid-base chemistry, descriptive chemistry, organic chemistry, and nuclear chemistry. Laboratory experiences will constitute an important part of this course both to reinforce laboratory skills and enhance students' understanding of the material. Exposure to chemistry applications in the real world is inherent in lessons and laboratory experiments. Honors Chemistry is designed as a preparatory course for the SAT Subject Test in Chemistry. Prerequisite: teacher recommendation

### **HONORS INDEPENDENT RESEARCH IN SCIENCE**

(Grades 11-12) allows students to explore deeply an academic topic, problem or issue of individual interest. Students design, plan and conduct a year-long research-based investigation to address their research question. Students will learn research methodology, employ ethical research practices and access, analyze and synthesize information as they conduct research. Students explore their topic, develop independent research skills and document their progress. The course culminates in an academic paper and public presentations of their work at science fairs and the 'Iolani Science Symposium. Students taking this course are encouraged to apply for the John and Violet Kay Summer Research Fellowship. Prerequisite: Approval of instructor

## ELECTIVE COURSES

### **BIOLOGICAL, CHEMICAL AND PHYSICAL**

#### **GASTRONOMY I** (Grades 11–12, one semester)

encompasses biology, chemistry, and physics as well as potentially touching on geology, geography, history, and culture. Students will inquire into how and why we eat what we eat to help students connect the lab sciences that they have already mastered to topics that touch their lives every day. Various methods of evaluation and assessment from designing and executing controlled experiments, analyzing data, writing reports, presenting to an audience, and producing video will be used. Topics include chemical, biological, and physical structure of foods, the path of food from farm table, and how food interacts with human body systems including the digestive and sensory systems.

### **BIOLOGICAL, CHEMICAL AND PHYSICAL**

#### **GASTRONOMY II** (Grades 11–12, one semester)

encompasses biology, chemistry, and physics as well as potentially touching on geology, geography, history, and culture. Students will inquire into how and why we eat what we eat to help students connect the lab sciences that they have already mastered to topics that touch their lives every day. Various methods of evaluation and assessment from designing and executing controlled experiments, analyzing data, writing reports, presenting to an audience, and producing video will be used. Topics include food preservation, chemical reactions and applied physics in food preparation, and the interactions of food with human body systems including the immune and sensory systems.

#### **CONSERVATION GENETICS** (Grades 11–12, one semester)

is an introduction to next generation DNA sequencing technologies and will provide students with molecular lab, bioinformatic, and data analysis skills. Students will learn how to sequence, assemble, and annotate whole genomes of native Hawaiian taxa. They will also learn how diversity is measured through analysis of genetic sequences and how that information can be applied to help conserve threatened species. Molecular genetics has had a large impact on our ability to manage endangered species and populations, resolve taxonomic uncertainty, and define management units. Taxa studied may include microbes, plants, or animals depending on the projects available.

#### **ENVIRONMENTAL SCIENCE** (Grades 11–12, one semester)

integrates physical, biological, and information sciences to study the environment and uses methods to identify, control, and prevent disruption of natural processes

and loss of biodiversity by human impacts. This environmental science course will focus on understanding both global and local environmental change. Students will collect physical, chemical and biological data, and apply the analyses of these data to design solutions to the deterioration of our Hawaiian environment.

#### **EXPLORATIONS IN CHEMICAL ANALYSIS I -**

**ENVIRONMENTAL CHEMISTRY** (Grades 11–12, one semester) is a 2nd year chemistry course immersing students in investigating chemistry concepts to greater depths via real world applied chemistry from lysozyme chemistry used in cancer research to contaminants in and around the watershed. This course introduces environmental issues of pollution in water, soil, and air, quantifying their presence with the introduction of quantitative laboratory techniques and properly treating data with statistical analysis. Possible topics and skills applicable to environmental problems and solutions such as renewable resources, catalysis, extraction, green chemistry, nanotechnology, electrochemistry, photovoltaic cells, solar energy, materials chemistry, photoelectric effect, spectrophotometry, gravimetric analysis, acid base chemistry, and lysozyme crystallization are examined. With heightened laboratory techniques and skills, students will create, examine, and conduct a short research project of their interest.

#### **EXPLORATIONS IN CHEMICAL ANALYSIS II - FOOD**

**CHEMISTRY** (Grades 11–12, one semester) is a 2nd year chemistry course focusing on the chemistry of food. Students expand and explore first-year chemistry concepts to greater depths in real world applied chemistry from coagulation techniques in making tofu to quantifying macro-mineral content in foods. Laboratory techniques and skills include titrations, chromatography, spectroscopy, gravimetric analysis, data and statistical analysis. Introduction to food chemistry – content of macrominerals, food dyes, coagulation, emulsions, food packaging, and caloric content assist to explore methods in chemical analysis techniques. Studies will cover nanotechnology, spectroscopy, organic chemistry, redox reactions, acid base chemistry related to food chemistry. Explorations in Chemical Analysis I and II are independent of one another, teaching laboratory technique and skills specific to the content learned. Students may take both Explorations in Chemical Analysis courses in non-sequential order for separate credit. After introduction of laboratory technique and skills, students will create, examine, and conduct a short research project of their interest.

## SCIENCE (CONTINUED)

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**GLOBAL HEALTH** (Grades 11–12, one semester) uses an interdisciplinary approach to improve student health literacy through an examination of the most significant public health challenges facing today's global population. What makes people sick? What social and political factors lead to the health disparities we see both within our own community and on a global scale? What are the biggest challenges in global health and how might they be met? Topics addressed will include: the biology of infectious diseases, understanding the statistics and quantitative measures associated with health, the social determinants of health, and the role of public and private organizations in shaping global health policy.

**HUMAN ANATOMY AND PHYSIOLOGY** (Grade 12, one year) is for students interested in understanding how their body works and in pursuing a health career. Students will investigate the structures and functions of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous, cardiorespiratory, immune, digestive and excretory. Emphasis will be placed on the physiological functions and interrelationships among these systems as they relate to exercise, nutrition and health. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, model building, and multimedia presentations.

**MARINE BIOLOGY** (Grades 11–12, one semester) investigates the biology and ecology of the major marine phyla, including microbes, algae, invertebrates, fishes, and marine mammals. Class discussions, laboratory experiments, and field studies will help students gain an understanding and appreciation of the role of marine organisms in the environment. Topics include classification of marine organisms, primary production and ocean food webs, ecological interactions within marine ecosystems, and human impacts upon the marine environment and its inhabitants. Students will use the knowledge gained in the course to educate their peers about current sustainability and conservation issues in the marine environment.

**MATERIALS SCIENCE** (Grades 11–12, one semester) will investigate the properties of metals, ceramics, plastics, composites, and modern materials, connecting the structure of a material to its performance for specific design needs. Students will engage in laboratory experiments and an examination of materials on a molecular level to understand the chemistry and physics involved in their properties. Case studies of materials advances will give us a better understanding of the science, materials, and design involved in our society.

Design projects will also help students to understand the process of solving a problem through engineering and materials selection.

**OCEANOGRAPHY** (Grades 11–12, one semester) combines aspects of physical, chemical, biological, and geological sciences to explore how the ocean functions as a part of a global system. Class discussions, laboratory experiments, and field studies will be used to gain an understanding and appreciation of the surrounding marine environment. Students explore how plate tectonics, ocean chemistry, ocean currents, waves, and tides have created and continue to shape a unique marine environment. Students will conduct independent research projects within the surrounding nearshore environment and will have opportunities to learn about and discuss current issues impacting the oceans and our climate.

### » ADVANCED PLACEMENT

*For information on pre-requisites for the AP courses below, please consult the acceleration guidelines on page 6 of this catalog. All AP Science courses are year long.*

**ADVANCED PLACEMENT BIOLOGY** (Grades 10–12) provides students with the conceptual framework, factual knowledge, and the scientific skills necessary to deal critically with the rapidly changing science of biology. Students will investigate how the process of evolution drives the diversity and unity of life, how biological systems reproduce and maintain dynamic homeostasis, how living systems store, retrieve, transmit and respond to information, and how biological systems interact based on complex properties. Class discussions, activities and labs will develop student inquiry and reasoning skills. Students will engage in scientific questioning, the collection and analysis of data and the application of mathematical routines while building conceptual connections within and across domains. Mastery of material and skills will be frequently assessed via written reports and summative essay questions.

**ADVANCED PLACEMENT CHEMISTRY** (Grades 10–12) covers many of the topics found in a typical first-year college general chemistry course, with an emphasis on developing and demonstrating skills students will need for success in college. Such skills include robust mastery of content, curiosity, time management, efficiency, discipline, motivation, and self-advocacy. The course is designed around the specific recommendations of the College Board. Within the broad range of college-level topics, memorization and formulaic problem-solving are

## SCIENCE (CONTINUED)

deemphasized in favor of developing deeper and more creative understanding of chemistry. In addition, most laboratory sessions in AP Chemistry are more rigorous than high-school level. Pre- and post-lab assignments require time and careful preparation; students learn how to handle a variety of specialized laboratory equipment and are required to keep a lab notebook. AP Chemistry also emphasizes the development of scientific writing skills: students learn how to explain concepts using clear and concise language and gain experience writing effective laboratory reports. AP Chemistry differs qualitatively from the usual secondary school chemistry course in that typical AP exam questions often cover multiple concepts at once. Such questions require breadth of knowledge and a big-picture grasp of chemistry. Most class exams comprise actual AP Chemistry questions written by the College Board, so students are well prepared for the May AP Exam.

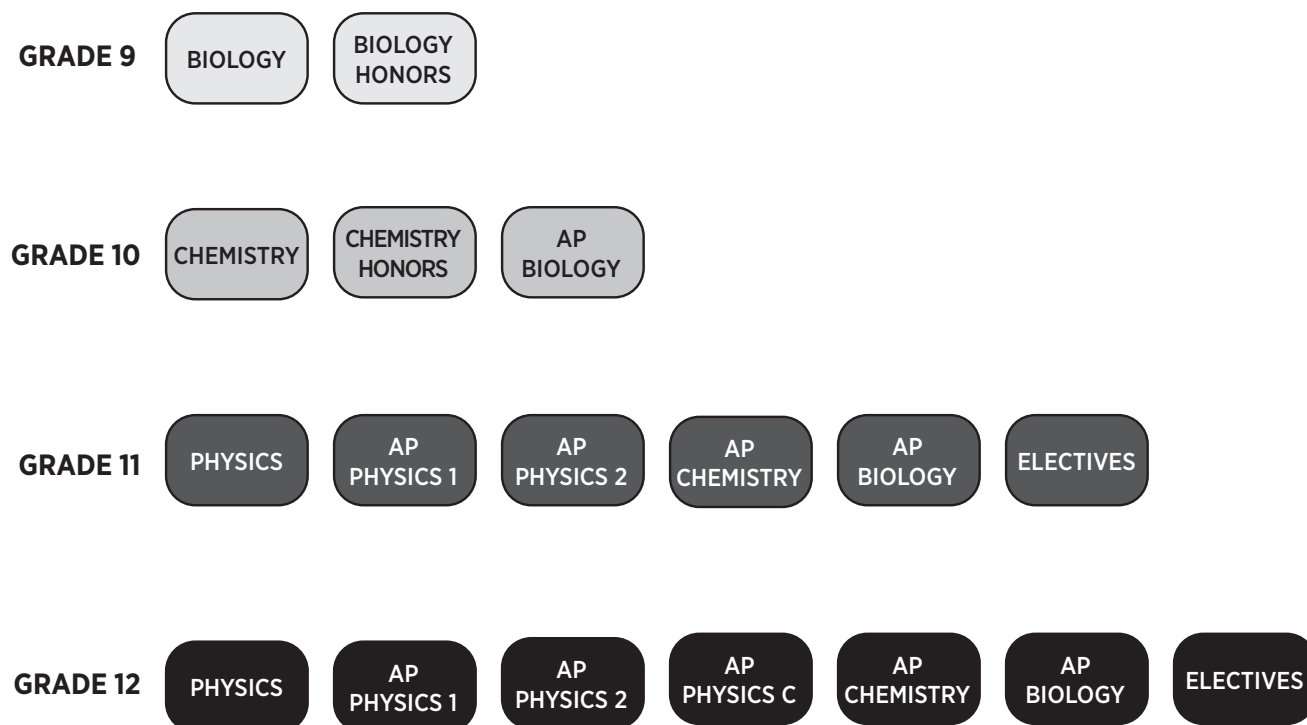
**ADVANCED PLACEMENT PHYSICS 1** (Grades 11–12) is equivalent to the first-semester of an algebra-based college physics course. It covers mechanics, waves, and electricity. The textbook is mathematically oriented, with

rigorous, challenging homework problems. The course includes significant laboratory work and prepares the student for future work in the sciences.

**ADVANCED PLACEMENT PHYSICS 2** (Grades 11–12) is equivalent to the second-semester of an algebra-based physics college course. Topics covered include fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. The textbook is mathematically oriented, with rigorous, challenging homework problems. In depth laboratory investigations and projects allow students to further understand and to apply concepts being learned.

**ADVANCED PLACEMENT PHYSICS C: MECHANICS, ELECTRICITY AND MAGNETISM** (Grade 12) is a second-year college level physics course for students enrolled in calculus and who have already completed a year of physics. The course concentrates on mechanics, electricity and magnetism—building upon the physics and problem-solving skills of a first-year physics course. Laboratory exercises related to the topics being studied are performed throughout the year.

### COURSE SEQUENCE







## WORLD LANGUAGES

The 'Iolani World Language Department provides sequences in six languages: Chinese, French, Hawaiian, Japanese, Latin, and Spanish. Students may begin language study in Grade 7 or 9.

The World Language Department teaches languages following ACTFL National Standards for Foreign Language Education\*: Communication, Culture, Comparison, Connections and Communities. The objective is to help students develop their communicative competence in listening, speaking, reading, and writing through the incorporation of the skills, knowledge, and expertise students must master to succeed in work and life as outlined in the 21st Century Student Outcomes\*\*: Life and Career Skills, Learning and Innovation Skills, Information, Media and Technology Skills. Another important objective is to provide the foundation for lifelong learning and interest in languages and cultures.

The objectives of the courses are to teach students to understand, speak, read, and write the language they are studying, and to introduce them to world cultures. The target language is introduced in the classroom through the integration of technology and innovative learning techniques. Study through levels IV and V may earn advanced placement (AP) credit and/or placement in higher level courses in college for most languages.

\* American Council on the Teaching of Foreign Languages: <http://www.actfl.org/node/192>

\*\*Partnership for 21st Century Skills: <http://www.p21.org/our-work/p21-framework>

## WORLD LANGUAGES (CONTINUED)

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**CHINESE** introduces the students to Mandarin through the “5Cs” principles of the National Standards for Foreign Language Education—Communication, Culture, Comparison, Connections and Communities. The objective is to help students develop their communicative competence in listening, speaking, reading, and writing as well as learning technology applications of the 21st century. Concerns move from early attention to personal interests, families and school life, to increased emphasis on community as well as global challenges. Cultural activities are introduced to enhance students’ learning. The sequence ends with AP Chinese Language and Culture and/or an honors course at level V, and the simplified form of characters are mainly used.

**FRENCH** builds students’ proficiency through communication and immersion in an authentic cultural context. Class interaction, textbook instruction, and online exercises are keys to students’ success. In Levels I through III, students master the syntax and style needed to read, write, hear and speak French with accuracy and fluency. From Level II, students are placed in regular or honors sections. At Level IV, students master advanced grammar through oral and written presentations of literary and historical texts. French V gives students the opportunity to increase their knowledge of French history with oral and written presentations in order to better understand contemporary French culture complemented by a film program. The AP French Language and Culture course may be taken after Level III or IV. The AP French course is designed to further students’ knowledge of the language and culture of France and the Francophone world. Students at all levels are encouraged to participate in the French National Contest each year.

**HAWAIIAN**, one of our state’s two official languages and the language of our school’s founders, reinforces ‘Iolani’s important connection to Hawai‘i’s land and heritage. The objective of the program is to provide students with the ability to communicate effectively in the target language by developing listening, reading, speaking and writing skills in Hawaiian and cultivating a deeper understanding of Hawaiian culture. The program aims to provide students with the ability to not only communicate meaningfully, but also gain a greater awareness of Hawaiian worldview as expressed through the language. Curriculum is supplemented by drawing upon the rich resources available in the state including Hawaiian language newspapers and documents from the 19th century, audio recordings of native speakers, stories and poetry written by native speakers, and various other source materials. As the newest addition to the world languages offered at ‘Iolani, the Hawaiian language program continues to grow, and has expanded to levels one through four.

**JAPANESE** begins with elementary conversational forms and everyday vocabulary and progresses to technical vocabulary and honorific speech appropriate to business dealings in real life. In the written language, Hiragana and Katakana are covered in the first year, and Kanji of increasing difficulty is introduced at level II. Calligraphy (brush writing) is introduced in Japanese III. Lessons are regularly reinforced through cultural presentations by the students, teachers, or guest lecturers. Japanese IV and V are conducted in Japanese. AP Japanese Language and Culture consolidates Japanese learned at earlier levels and molds the language into an asset which may prove useful to students in their future endeavors. Kanji used in the real world is introduced via authentic materials; in general, holistic language learning is the focus of the course. Select students take the annual National Japanese Examination.

**LATIN** endows students with a richer English vocabulary and greater precision and versatility in English composition. Through the study of Latin, students also develop a thorough understanding of the history, mythology, culture, and enduring legacy of ancient Rome and of Classical civilization. Latin I and II cover the fundamentals of Latin grammar, syntax, and vocabulary, while also training students to read increasingly more challenging texts by Roman prose and poetry authors. In Latin III and IV, students read and discuss authentic texts from a range of important Roman writers, including Cicero, Caesar, Catullus, Ovid, Vergil, and Horace. AP Latin, which may be taken after Latin III or IV, concentrates on the in-depth study of two texts: Vergil's Aeneid and Caesar's commentaries on the Gallic Wars. Latin V is offered to students in their sixth overall year of study and focuses on Latin lyric poetry. All students take the National Latin Exam annually.

**SPANISH** gives students a working command of the language through personal involvement and understanding, incorporating the national content standards for foreign language education in the 21st century in the curriculum, with emphasis on the use of Spanish for practical communication to prepare students to live in a global world. The program uses diverse materials such as e-texts, workbooks, videos and the Internet to expose students to authentic materials. Technology also plays an integral role in instruction and learning. From level II on, the students divide into regular and accelerated sections. Spanish 5 Honors, Advanced Placement Spanish Language & Culture and Advanced Placement Spanish Literature may be taken in the fourth or fifth year. Students may elect to take the National Spanish Exam annually.

# ADDITIONAL COURSES

Some courses do not fit neatly into departmental divisions. They do, however, offer students the opportunity to explore exciting areas of study.

**PSYCHOLOGY** (Grade 12) is a course that examines the relationship between mind and body and investigates the causes and symptoms of everyday emotional problems. Students discuss motivation and social dynamics and learn the foundations of psychological research and testing.

**AP PSYCHOLOGY** (Grade 12) is a college level course introducing students to the systematic and scientific study of behavior and mental processes. Students examine the facts, principles and phenomena associated with each of the discipline's major subfields in order to understand the basic methods, theories and findings of psychology. The course culminates with the AP examination in May.

**AP SEMINAR** is a college preparatory course typically taken in Grades 10, 11, or 12. This full-year AP course engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Students are assessed on three components: a team project and presentation, an independent research essay and presentation, and a written exam in May. Students must obtain a score of three or higher to be able to receive AP certification. Students may elect to take only AP Seminar without completing the entire AP Capstone program.

**AP RESEARCH** is typically taken in Grade 12. Students design, plan and conduct a year-long research-based investigation on a personally-chosen subject. The assessment culminates with a 5000-word academic thesis paper, as well as a public presentation. Students must obtain a final score of three or higher to be able to receive AP certification. Students must have successfully completed AP Seminar to take this course.

**AP CAPSTONE** is a new program developed by the College Board. It consists of two full year AP Courses: AP Seminar and AP Research. Students who successfully complete these two courses in addition to four other AP exams, all receiving a score of 3 or higher, will receive an AP Capstone Diploma. Those that complete only AP Seminar and AP Research with a score of 3 or higher receive the AP Capstone Certificate.