Academy for Academic Excellence

HIGH SCHOOL COURSE CATALOG
2025-2026

Dear AAE High School Students and Parents

It's time to choose classes for next year!

Thank you for entrusting your child's education to the AAE. We take this trust very seriously and work every year to refine our offerings to best meet the needs of our students.

We will once again use the Infinite Campus program to communicate course information and choose classes electronically. The following information will guide you through the upcoming steps.

1. During the month of March, the School Counselor will meet with students in their English classes to complete course selection. Students will fill out a paper course selection form first and then will receive assistance in entering that information into the Infinite Campus system.
2. The following pages will provide all the details of course offerings in the High School program.

Sincerely,

Mrs. Cook

School Counselor

Table of Contents

1

TYPICAL COURSE OF STUDY FOR AAE STUDENTS 7

University of California: A-G Subject Area Requirements 8

VALEDICTORIAN/SALUTATORIAN 9

ACADEMIC AWARDS 10

GRADING/UNIT STRUCTURE 11

RANK IN CLASS 11

VICTOR VALLEY COLLEGE - DUAL ENROLLMENT PROGRAM 12

What is Dual Enrollment? 12

What are the advantages and concerns of Dual Enrollment? 12

Some issues of concern would be: 12

What courses may be taken at VVC? 13

What does the AAE expect? 13

GRADUATION/COLLEGE ENTRANCE COMPARISON 15

Credit Acceptance 16

Add/Drop Process 16

Participation in Commencement 16

STUDENT SERVICES PROGRAM 17

ENGLISH/LANGUAGE ARTS DEPARTMENT 18

PHILOSOPHY 18

GOALS 18

COURSE OFFERINGS 18

COURSE DESCRIPTIONS 19

FOREIGN LANGUAGE DEPARTMENT 22

PHILOSOPHY 22

GOALS 22

CALIFORNIA STATE SEAL OF BILITERACY 22

COURSE OFFERINGS 22

COURSE DESCRIPTIONS 23

MATH DEPARTMENT 24

PHILOSOPHY 24

GOALS 24

COURSE OFFERINGS 24

DEPARTMENT POLICIES 25

COURSE DESCRIPTIONS 25

SCIENCE DEPARTMENT 30

PHILOSOPHY 30

GOALS 30

COURSE OFFERINGS 30

COURSE DESCRIPTIONS 31

SOCIAL SCIENCES DEPARTMENT 34

PHILOSOPHY 34

GOALS 34

COURSE OFFERINGS 34

COURSE DESCRIPTIONS 35

ELECTIVES 39

AP Capstone 39

ASSOCIATED STUDENT BODY (ASB) 40

VISUAL AND PERFORMING ARTS DEPARTMENT 41

Performance and Presentation Standards 41

ART PROGRAM 42

Philosophy 42

GOALS 42

COURSE DESCRIPTIONS 43

MUSIC PROGRAM 46

PHILOSOPHY 46

GOALS 46

COURSE DESCRIPTIONS 47

VIDEO PRODUCTION PROGRAM 51

PHILOSOPHY 51

COURSE DESCRIPTIONS 51

PHYSICAL EDUCATION 53

PHILOSOPHY 53

COURSE DESCRIPTION 54

SPACE FORCE JUNIOR ROTC DEPARTMENT 55

PHILOSOPHY 55

GOALS 55

COURSE OFFERINGS 55

DEPARTMENT POLICIES 56

COURSE DESCRIPTIONS 57

TECHNOLOGY 66

ELECTIVE/CAREER SKILLS 68

TYPICAL COURSE OF STUDY FOR AAE STUDENTS

9th Grade	10th Grade
Intro to Literature (regular or honors) Earth Science (regular or honors) Math Spanish I Physical Education Elective (recommend visual/performing art)	World Literature (regular or honors) Biology (regular or honors) Math World History (regular or AP) Spanish II Physical Education
11th Grade	**12th Grade**
American Literature or AP English Language Chemistry (regular or honors) Math US History (regular or AP) Elective of choice Elective of choice	British Literature or AP English Literature Government (regular or AP) – 1 semester Economics – 1 semester (Personal Finance starting with Class of 2027) Elective of choice (recommend 4th year of math) Elective of choice (recommend 4th year of science) Elective of choice

- Electives provide opportunity for visual and performing arts, upper division math, science, and language other than English.

Preparation for Four-Year Colleges

Four-year college-bound students must fulfill college entrance requirements for specific colleges in addition to high school graduation requirements. While the specific requirements differ among institutions, many private schools and all University of California and California State schools require a certain number of approved courses from categories called A-G pattern courses which include: A. History, B. English, C. Mathematics, D. Laboratory Science, E. Foreign Language, F. Visual and Performing Arts, and G. Electives.

University of California: A-G Subject Area Requirements

WHAT IS THE PURPOSE OF THE A-G SUBJECT AREA REQUIREMENTS?

The purposes of the A-G subject area requirements are to ensure that first time freshman…

- Can participate fully in the first-year program at the University in a broad variety of fields of study
- Have attained the necessary preparation for courses, majors and programs offered at the University
- Have gained knowledge that will provide breadth and perspective to new, more advanced studies
- Have attained essential critical thinking and study skills.

WHO IS RESPONSIBLE FOR ESTABLISHING THE A-G REQUIREMENTS?

The Board of Admissions and Relations with the Schools (BOARS) establishes the subject areas and pattern of courses required for minimum eligibility for freshman admission to the University of California. BOARS is a committee of the University's Academic Senate and includes faculty representatives from each campus of the University. The Academic Senate has been given the responsibility from the UC Regents to set the conditions for admission, subject to final approval of the Board of Regents.

The California State University system has agreed to accept courses certified by the University of California to meet its subject area requirements, which, beginning with students entering in the fall of 2003 are the same as California State University's requirements.

WHAT ARE THE GENERAL CRITERIA FOR COURSES USED TO SATISFY THE REQUIREMENT?

- Be academically challenging

- Involve substantial reading and writing
- Include problems and laboratory work, as appropriate
- Show serious attention to analytical thinking as well as factual content
- Develop students' oral and listening skills

VALEDICTORIAN/SALUTATORIAN

The valedictorian and salutatorian are designed to recognize the highest achieving students in each graduating class. The following criteria will be considered for the selection of each:

1) Total Weighted GPA 9- 12 – the student is in the top five (5) of the class when ranked according to the total cumulative weighted GPA, based on the first seven semesters of high school, otherwise defined as through the first semester of the student's senior year of high school.
2) Academic Rigor – The students have engaged themselves in an academically challenging course of study and continued to enroll in a rigorous course of study for their senior year. Candidates will be evaluated based on the total number of honors, Advanced Placement (AP), and college courses taken during the first seven semesters of high school. Candidates that earn the California State Seal of Biliteracy, Golden State seal, Tri-M Music seal, National Honor Society seal, or the AP Capstone diploma will be given additional consideration.
3) School Involvement – the student has been involved in on-campus activities through their high school career. Additional consideration will be given to activities in which the student held a leadership capacity:
    a. School Sponsored Club: either for multiple years (two or more) with the same club or with multiple clubs (at least two) ***or***
    b. Sports: either one sport for multiple years (two or more) or with multiple sports (at least two) ***or***
    c. Visual and Performing Arts performance groups (two years or two different groups)
4) AAE Code – has the student demonstrated Courage, Generosity, and Honor

5) Additional consideration will be given to students who complete all high school core classes at the AAE.

Recommendations and Announcement of students being honored will be brought forward as follows:

1) School Counselor will identify the top five (5) students in the graduating class ranked by total cumulative weighted GPA and give the list of the candidates to the administrative team.
2) The administrative team consisting of the TK-12 Principal and the MS/HS Vice Principal will then determine the Valedictorian(s) and Salutatorian(s).
3) School officials reserve the right to rescind the offer of this honor due to a breach of the above criteria in the final semester of the student's senior year.
4) The Principal will have final say as necessary.

ACADEMIC AWARDS

Graduates of each graduating class will be honored as follows:

- Valedictorian and Salutatorian will have specially designated cords or ribbons.
- Students with a cumulative GPA of 4.0 or above through the first semester of the senior year will have gold cords.
- Students with a cumulative GPA of 3.6 to 3.99 or above through the first semester of the senior year will have silver cords.

Each semester students will be recognized for their academic accomplishments for the previous semester as follows:

- Principal's Honor Roll = 3.6 GPA or above
- Honor Roll = 3.3 to 3.59 GPA
- An academic letter can be earned when a student earns a Principal's Honor Roll for two consecutive semesters. A chevron will be earned for each semester they are on Principal's Honor Roll thereafter.

A weighted GPA will be used for the above awards. If a student believes he/she qualifies for an award listed above, they should contact the school registrar.

GRADING/UNIT STRUCTURE

All classes (on campus and independent study) are awarded 5 units of credit for the successful completion of each semester. The one exception to this is homeroom, which is 2.5 units/credits per semester. All semester grades are a permanent record on the student's transcript.

For the purposes of calculating a grade point average the following applies:

1) Unweighted GPA
    - A = 4 points
    - B = 3 points
    - C = 2 points
    - D = 1 point
    - F = 0

2) Weighted GPA - Same as above with the following academic courses given extra weight: honors, advanced placement, VVC courses that are 100 level or higher.
    - A = 5 points
    - B = 4 points
    - C = 3 points
    - D = 1 point
    - F = 0

Note: Core academic classes (English, Math, Science, Social Science) and all other courses on the AAE University of California Course Approved list the grades will be as follows: A, B, C, & F. There will be no D grades given.

RANK IN CLASS

Rank in class will be determined based on the student's total weighted cumulative GPA.

VICTOR VALLEY COLLEGE - DUAL ENROLLMENT PROGRAM

What is Dual Enrollment?

Dual Enrollment is a system provided by the community college system that allows students to be concurrently enrolled in college courses, while still attending high school. Dual Enrollment is a privilege and a wonderful opportunity provided to AAE students and must be handled responsibly. The purpose for the program is to provide:

- An opportunity for a student to be challenged by college-level coursework
- An opportunity for students to be better prepared for transition into the college atmosphere

What are the advantages and concerns of Dual Enrollment?

Dual Enrollment has many advantages for the *motivated* student. Some ***advantages*** are:

- Challenging coursework above the high school level
- Earning college credits before high school graduation
- Earning high school credits in addition to college credits for each college course
- Cost for college coursework is very reasonable

Some issues of concern would be:

- Grades achieved through dual enrollment are **permanently** part of the student's **college** transcript.
- College coursework for concurrently enrolled students is **not** modified for content and is created for "adults"

- The college campus is an "**adult**" atmosphere
- CEP students are **last** to receive classes/ difficult to get desired courses

What courses may be taken at VVC?

Subject to change per VVC

- All academic courses eligible for transfer to the CSU or UC systems (provided student meets course prerequisite). These are courses number 100 or higher.
- All vocational/technical courses that are associate degree applicable (provided student meets course prerequisite).

What does the AAE expect?

Student Responsibilities

The AAE and Victor Valley College have a wonderful partnership that includes the concurrent enrollment program. VVC is excited to be helping students' transition into college. However, this program is a privilege and the AAE student wishing to participate will be expected to:

- Represent the AAE in "Courage, Generosity and Honor." (Please see the Student/Parent Handbook for the definitions and expectations)
- Attend **all** classes
- Complete **all** assignments *on time!*
- Spend adequate time studying (3 hours of study for each unit of college coursework is recommended by VVC)
- If the class does not meet the student's need, the student will **drop** the course by the drop date

Parent Responsibilities

- Be supportive and ***guard*** your student's VVC class and study time. (Check your student's planner before scheduling events)
- ***Weekly*** review the student's work for progress
- Check course syllabus to see that grades for assignments are being recorded

Help your student understand that the decisions he/she is making *today* can have *repercussions* for the rest of his/her life. The college transcript will follow your student forever!

How do I enroll in the Dual Enrollment Program?

The student must schedule a meeting with an AAE Counselor. A student's participation in dual enrollment depends on:

- Past performance in VVC courses
- Past performance in AAE classes

These items must be verified before a dual enrollment form can be approved. The counselor will give the student all information and forms needed to begin the dual enrollment process. Please, **do not** ask for a dual enrollment form without scheduling this appointment. The process takes time, so please schedule early and do not wait until the last minute. It will be difficult enough to get the desired classes without being late in the process. Be prepared to complete the dual enrollment form at that time. A counselor will then sign the form and forward it to VVC for their approval. Once VVC approves a student's dual enrollment form, it is the student's responsibility to register themselves for their class.

Class Limitations and Credit

Dual enrollment is designed to give students the challenge of ***college level*** coursework. AAE issues high school credit for ***college level*** coursework at the following rate:

VVC Units	AAE Credits
1 unit	3.3 credits
2 units	6.7 credits

3 units	10 credits
4 units	13.3 credits
5 units	16.7 credits

To preserve the integrity of the program only those classes that are UC or CSU approved in the VVC catalog will be accepted for GPA "weighting."

VVC College Textbook Procedure

The dual enrollment tuition and parking permit fees are not paid by the AAE. The cost of the books is the student's responsibility and will encourage the responsible choice of classes.

GRADUATION/COLLEGE ENTRANCE COMPARISON

Subject Area	AAE Graduation Requirements	UC / CSU Entrance Requirements
Social Science (Area - A)	**3 yearlong courses** World History - 1 yr. US History - 1 yr. American Gov't - ½ yr. / Economics - ½ yr. (Personal Finance ½ yr starting with Class of 2027)	**2 years required** **(3 years recommended)** World History - 1 yr. US History - 1 yr. **OR** World History - 1 yr. US History - ½ yr. /Amer. Gov't. - ½ yr.
English (Area - B)	**4 yearlong courses** Intro to Literature World Literature American Literature/AP English Language British Literature/AP English Literature	**4 years required** Intro to Literature World Literature American Literature British Literature
Mathematics (Area - C)	**3 yearlong courses** **including at least** Integrated Math 1 Or Algebra 1 and Geometry	**3 years required** **(4 years recommended)** College-prep mathematics that includes the topics covered in elementary and advanced algebra and 2D/3D geometry. Approved integrated math courses may be used to fulfill part or all of this requirement
Science (Area - D)	**3 yearlong courses** Earth Science - 1 yr. Biology - 1 yr. Chemistry - 1 yr.	**2 years required** **(3 years recommended)** 2 years of lab science
LOTE (Area - E) Language Other Than English	1 year of a language other than English	**2 years required** **(3 years recommended)**

	OR	
VPA (Area - F) Visual or Performing Art	1 year of a Visual or Performing Art	**1 year required** VPA courses such as art, drama/theater, music, dance, or video
Electives (Area - G)	AAE students must complete a minimum of 70 HS elective credits to graduate from high school.	**1 year required** Any additional UC approved course
Physical Education	**2 years required**	**None**

Credit Acceptance

Credit acceptance for transfer or summer school work from other institutions is based on PRIOR APPROVAL from the Counseling Office. Please make an appointment with your counselor prior to enrolling in outside courses to meet graduation and/or A-G requirements.

Add/Drop Process

A two-week window at the beginning of the first semester and one-week window for second semester is provided for students to adjust their schedule of classes. All AAE classes are considered year-long in nature, therefore, second semester changes are for the purpose of correcting problems only. Students should follow the established procedure for schedule change requests through the Counseling Office. A course dropped after four weeks of the semester will result in a failing grade for that course.

Participation in Commencement

Participation in commencement exercises requires that all graduation requirements be satisfied prior to graduation. Senior students who have not completed all of the necessary coursework for graduation, upon administrative approval, may be granted an extension. This extension will expire on the first day of the following fall semester.

STUDENT SERVICES PROGRAM

Services	Activities
Academic Counseling	**High School Planning and Implementation** ● Each new student will develop an education/career plan with the help of the homeroom teacher and counselor and the cooperation of his/her parent ● Assist students with their post high school plans and decisions and advise them of options available **Scheduling** ● Scheduling and orientation of new students ● Annual course selection (individual appointments and/or group conferences) ● 8th grade parent/student orientation **Communication with Parents** ● Phone / email contacts ● Grade checks as requested – progress reports ● Letters of recommendation for employment, college entrance, and scholarships ● Graduation status reports
College Counseling	**Post-High School Planning** ● College fair information

	• Help students learn the sources and types of financial aid • Provide scholarship applications for seniors • Provide a post high school/College Awareness Workshop • Provide articulation with colleges and universities
Career Development Counseling	• Help students develop an awareness of career opportunities through vocational information and planning • Develop awareness of the student's interests, abilities, and aptitudes • Provide students with opportunities for career awareness
Personal Counseling	**Personal Assistance and Academic Achievement Support** • Students will be encouraged to seek counselor assistance to further interpret and clarify topics covered in the guidance program • Counseling by student request • Personal/social problems • Address issues of life when they become an obstacle to learning • Class/school problems • Drugs and alcohol-related problems • Referral to the School Psychologist as necessary
Academic Assessments	Academic Assessment • SBAC • The PSAT is given to each student in grades 9th – 11th • ASVAB career exploration for grade 10 • Inform students of the SAT, SAT Subject Tests and ACT

ENGLISH/LANGUAGE ARTS DEPARTMENT

PHILOSOPHY

Every student should graduate from high school with communication skills that enable the student to write and speak clearly and concisely. Further, it is important for every student to have a greater appreciation of literature through improved reading and critical thinking skills. With these skills and appreciation, a student may realize a greater capacity for future success.

GOALS

Members of the English Department strive to assist students in improving their ability to use written language effectively and enhancing their academic success through better reading and critical thinking skills. These skills will enable the student to communicate in a variety of means while increasing their knowledge and appreciation of literary works.

COURSE OFFERINGS

University College Preparatory/General Education

Grade 9:	Introduction to Literature and Composition or Intro to Lit Honors
Grade 10:	World Literature and Composition or World Lit Honors
Grade 11:	American Literature or English Language AP
Grade 12:	British Literature or English Literature AP
Yearbook	Elective

COURSE DESCRIPTIONS

71150 INTRODUCTION TO LITERATURE AND COMPOSITION *UC APPROVED

**Required for all freshman students*

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

Course Description: This course is for students entering the ninth grade. It will help students' understanding of literature. They will read texts covering four genres: short story, non-fiction, poetry, and drama and will analyze recurrent patterns and themes in historically or culturally significant works. Students will read at least two novels and respond with a compare/contrast essay and character analysis. Students will gain skills necessary for competent writing and reading by focusing on the mechanics of language, vocabulary development and directed reading and writing. Students will complete a variety of writing activities, including narrative, expository, persuasive, informational, and descriptive writing that demonstrates research, organization, and drafting strategies. Students will respond orally to the literature in all genres.

71160 INTRODUCTION TO LITERATURE AND COMPOSITION HONORS *UC APPROVED

**Required for all freshman students*

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

Course Description: This course is for students entering the ninth grade. It will help students' understanding of literature. They will read texts covering four genres: short story, non-fiction, poetry, and drama and will analyze recurrent patterns and themes in historically or culturally significant works. Students will read at least two novels and respond with a compare/contrast essay and character analysis. Students will gain skills necessary for competent writing and reading by focusing on the mechanics of language, vocabulary development and directed reading and writing. Students will complete a variety of writing activities, including narrative, expository, persuasive, informational, and descriptive writing that demonstrates research, organization, and drafting strategies. Students will respond orally to the literature in all genres.

Although this honors course guides students to develop the same skills as Intro to Literature, here the pace of the work, the sophistication (and thus difficulty) of literature studied, the need for independent learning, and the expectation of work quality (depth and breadth) increase.

71250 WORLD LITERATURE AND COMPOSITION *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 9th grade English course

Course Description: This course will guide students through a progression of reading, analysis, and writing skills, building on the foundation of Intro to Literature (9th grade) and preparing students for the challenges of future coursework both in high school and in college. Systematic, progressive writing projects sharpen students' writing skills as they focus on structure, unity, coherence and the logic/psychology of effective argumentation. The study of culturally significant literature, both fiction and non-fiction, provokes both contemplation of the essential questions' literature asks and comprehension of reading itself as we explore each author's purpose and craft.

71260 WORLD LITERATURE AND COMPOSITION HONORS *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 9th grade English course

Course Description: This course will guide students through a progression of reading, analysis, and writing skills, building on the foundation of Intro to Literature (9th grade) and preparing students for the challenges of future coursework both in high school and in college. Systematic, progressive writing projects sharpen students' writing skills as they focus on structure, unity, coherence and the logic/psychology of effective argumentation. The study of culturally significant literature, both fiction and non-fiction, provokes both contemplation of the essential questions' literature asks and comprehension of reading itself as we explore each author's purpose and craft.

Although this honors course guides students to develop the same skills as World Literature, here the pace of the work, the sophistication (and thus difficulty) of literature studied, the need for independent learning, and the expectation of work quality (depth and breadth) increase.

71350 AMERICAN LITERATURE *UC APPROVED

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 10th grade English course

Course Description: Students will study works by American authors from Puritan times to the present. Literature will include fiction and nonfiction selections, including works seminal to American history. Student compositions will be based on the readings and will encourage students to make precise, knowledgeable assertions about the readings, establishing the significance of the claims and substantiating them with evidence. Students will refine their use of research skills, which will be put to use in writing essays and making oral and electronic presentations. Students will work to develop and strengthen writing by planning, revising, editing, and rewriting. Students will write routinely over extended time periods.

71360 AP ENGLISH LANGUAGE & COMPOSITION *UC APPROVED

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 10th grade English course

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: Students will read a variety of fiction and non-fiction works of literature. They will identify and explain an author's use of rhetorical strategies, speculating about authorial purpose in employing them. Students will increase their ability to apply effective strategies in their own writing; they will create and sustain arguments based on readings, research, and/or personal experience; they will demonstrate understanding and mastery of standard written English, as well as stylistic maturity in their own writings; they will write in a variety of genres and contexts, both formal and informal, employing appropriate conventions; they will produce expository and argumentative compositions that introduce a complex central idea and develop it with appropriate, specific evidence, cogent explanations, and clear transitions; and they will move effectively through the stages of the writing process, with careful attention to inquiry and research, drafting, revising, editing, and review. The AP exam will be offered in the Spring.

71451 ENGLISH IV *UC APPROVED

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 11th grade English course

Course Description: This thematic English IV course explores enduring literary themes through a diverse selection of British and world literature, with a focus on identity, power, heroism, resistance, and imagination. Students analyze texts across genres and time periods, from classic epics and tragedies to modern fantasy and satire. The course emphasizes critical thinking, analytical writing, creative expression, and comparative analysis, preparing students for college-level reading and writing while fostering independent interpretation and thoughtful reflection.

71460 AP ENGLISH LITERATURE & COMPOSITION *UC APPROVED

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of college prep 11th grade English course

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: This course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the way's writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. Such reading is accompanied by thoughtful discussion and writing about those books in the company of classmates. Writing is also an integral part of this course. Assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. Writing instruction includes attention to developing and organizing ideas in clear, coherent, and persuasive language. The AP Exam will be offered in the Spring.

79320 YEARBOOK

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Familiarity with various computer design programs would be helpful, but not required. Students must be self-motivated, committed to excellence, able to follow directions, meet deadlines, and support out-of-class projects and activities.

Course Description: This is a year-long elective course. Students will learn and experience cutting edge Desktop Publishing, Graphic Design, and Typography using the latest publishing software. Students will research a market, create a product (yearbook), and produce and sell their product. Students will also learn photography, journalism, sales, advertising, public relations and teamwork. Students of advanced skills will be selected to serve as editors and thus assume additional time/commitment responsibilities. These students will be required to meet twice weekly for an editorial staff meeting, in addition to attending regular class meetings. Participation in additional fund-raising activities may be required.

FOREIGN LANGUAGE DEPARTMENT

PHILOSOPHY

The world is rapidly changing, especially in terms of technology, communication, politics and culture. Clearly, language is the connection that better enables us to identify, express, tolerate cultures, and share our ideas and self with each other. At the Academy for Academic Excellence, the study of a second language allows students to successfully compete in an ever-changing world.

The California State University system and the University of California system require two years of the same foreign language for admission. Both however, recommend three years of the same language.

GOALS

The study of a second language allows students the opportunity to prepare themselves to successfully compete in today's world. We will assist your son or daughter to accomplish the following goals:

- Develop an understanding and appreciation (oral, written comprehension, listening) of the second language. Various forms of technology will be employed including CD ROM language programs, the Internet, tapes, E-mail contacts and multi-media to refine these skills.
- Encourage insight and appreciation of the second language as well as an understanding of the history, culture and people of that land.
- Prepare your child to be successful in a dynamic world of the 21st century where communication, acceptance, and tolerance of others are necessary for success and a peaceful co-existence.

CALIFORNIA STATE SEAL OF BILITERACY

Students at the AAE are eligible to earn the California State Seal of Biliteracy by:

- Completing 4 years of Spanish during high school
- On their 11th grade state English assessment, student meets the state standard

COURSE OFFERINGS

Spanish I

Spanish II

Spanish III Honors

AP Spanish Language

COURSE DESCRIPTIONS

75110 SPANISH I *UC APPROVED

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: Spanish I is an introductory course for students who wish to learn a foreign language. It is intended to develop limited facility in each of the major communication skills: listening, reading, speaking, and writing. Major emphasis is on development of the ability to speak fluently with accurate pronunciation and intonation, while fostering an appreciation of the culture.

75120 SPANISH II *UC APPROVED
GRADE LEVEL: 9, 10 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Spanish I or assessment by teaching staff

Course Description: This course is designed to teach students listening, speaking, reading, and writing skills in preparation for advanced work. Students will be able to express themselves at a basic level in present and past tenses. Additional emphasis will be focused on reading comprehension and verbal expression in Spanish.

75132 SPANISH III HONORS *UC APPROVED
GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Spanish II

Course Description: Spanish III Honors is an advanced course that is intended to prepare students for success in AP Spanish Language. In this course, students move towards fluency in the Spanish language by continuing to expand their vocabulary and making a more in-depth study of language structure. Spanish language literature is introduced and students demonstrate their mastery through various assessments that include; but are not limited to, presentations, writing, skits, and summative assessments. Students are required to complete an end of the year project and communicate effectively, with this said, this course will be delivered primarily in the target language.

75144 AP SPANISH LANGUAGE *UC APPROVED
GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Spanish III
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: The AP Spanish Language and Culture is a course designed for highly motivated students and for students who have completed Spanish 3, and/or have been recommended by his/her teacher for the AP level. Following the AP College Board Curriculum this class will focus on both grammatical accuracy and communicative fluency. Grammatical knowledge and vocabulary will be refined and expanded so that, as a student, you will be able to more easily comprehend written and spoken Spanish, and express your own ideas when writing and speaking. This class will allow you to continue to build proficiency in the areas of reading, writing, listening, and speaking through a variety of interactive and non-interactive activities such as compositions, oral presentation, skits, in-depth studies of Spanish and Latin American literature, history, and geography. Students are required to complete a binder, an end of the year project and/or take the AP exam.

MATH DEPARTMENT

PHILOSOPHY

We believe in creating learning environments where students practice and acquire the knowledge of mathematics. We believe that students should be able to proficiently apply a range of numerical, algebraic, geometric, and statistical concepts and the skills to formulate, analyze, and solve real world problems. The learning environment will facilitate inquiry, use of technology and the exploration of real-world phenomena. It will support continuous development of mathematical skills and the appreciation of mathematics as a discipline. Our mathematics program seeks to graduate students who will possess a sense of numbers, data analysis, spatial relationships, symbolic representations, and the ability to communicate mathematics with others.

GOALS

1. To help the student perform and master mathematical skills and algebraic processes.
2. To encourage students to seek precise solutions and use logical thinking.
3. To help students develop problem solving strategies and critical thinking skills.

COURSE OFFERINGS

- Foundations Math (Special Education only)
- Integrated Mathematics 1A
- Integrated Mathematics 1B
- Integrated Mathematics 1
- Integrated Mathematics 1 Honors
- Integrated Mathematics 2
- Integrated Mathematics 2 Honors
- Integrated Mathematics 3
- Integrated Mathematics 3 Honors
- AP Precalculus
- AP Calculus AB
- AP Statistics
- Consumer Math

DEPARTMENT POLICIES

1. Students passing one level of mathematics may not enroll in courses at a lower level.

2. Students in courses designated as year courses must pass both semesters in order to advance to the next level.
3. Students receiving a D during one or more semesters of math may be encouraged to repeat the course at teacher discretion to ensure content mastery. Any grade lower than 70% indicates deficiencies that have been observed and may cause failure in subsequent math courses.
4. It is recommended that 9th grade students take only one level of advanced math during their freshman year. If a student wishes, however, to petition for two levels of math coursework during the first year of high school then the student must request approval from Department Chair.

COURSE DESCRIPTIONS

72117 INTEGRATED MATHEMATICS 1A *UC APPROVED

GRADE LEVEL: 9, 10, 11 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: Integrated Mathematics 1A is the first year of the Mathematics 1 A/B four semester course which builds and strengthens students' conceptual knowledge of functions, linear functions, equations, inequalities, sequences, and basic exponential functions.

The purpose of this four-semester course is to develop students' ability to think mathematically and develop their conceptual understanding of mathematics and procedural fluency in mathematics. The course builds upon the basic algebraic and arithmetic knowledge that students gained in middle school. Students continue reviewing and developing skills to understand and apply concepts graphically, numerically, algebraically, and verbally. The essential topics covered in this course will deepen students' understanding of linear relationships by comparing them with exponential and quadratic relationships by allowing them to utilize skills that deal with data collection, graphical representations, and analysis of numerical relationships. Additional critical areas will provide students with a formalized view of mathematics by extending students' knowledge of geometrical figures that were learned in prior grades. Students will apply properties of theorems of congruence to geometrical figures in order to develop skills that deal with justifying steps and communicating logically when solving a problem independently or cooperatively. The course will tie together algebraic and geometrical concepts so that students experience mathematics as a comprehensible, logical, and applicable topic that will be a useful tool when solving problems in the real world.

72118 INTEGRATED MATHEMATICS 1B *UC APPROVED

GRADE LEVEL: 10, 11 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Integrated Mathematics 1B

Course Description: Integrated Mathematics 1B is the second year of the Mathematics 1 A/B four semester course which builds and strengthens students' conceptual knowledge of functions, systems of linear equations, systems of linear inequalities, one variable descriptive statistics, correlation and residuals, analyzing categorical data, mathematical modeling, and both coordinate and transformational geometries.

The purpose of this four-semester course is to develop students' ability to think mathematically and develop their conceptual understanding of mathematics and procedural fluency in mathematics. The course builds upon the basic algebraic and arithmetic knowledge that students gained in middle school. Students continue reviewing and developing skills to understand and apply concepts graphically, numerically, algebraically, and verbally. The essential topics covered in this course will deepen students' understanding of linear relationships by comparing them with exponential and quadratic relationships by allowing them to utilize skills that deal with data collection, graphical representations, and analysis of numerical relationships. Additional critical areas will provide students with a formalized view of mathematics by extending students' knowledge of geometrical figures that were learned in prior grades. Students will apply properties of theorems of congruence to geometrical figures in order to develop skills that deal with justifying steps and communicating logically when solving a problem independently or cooperatively. The course will tie together algebraic and geometrical concepts so that students experience mathematics as a comprehensible, logical, and applicable topic that will be a useful tool when solving problems in the real world.

72110 INTEGRATED MATHEMATICS 1 *UC APPROVED

GRADE LEVEL: 9, 10, 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of Math 8

Course Description: Integrated Mathematics 1 is the first of a three-year sequence of courses designed to prepare students for a rigorous college curriculum. It uses a problem-based approach with concrete models. The course helps students to develop multiple strategies to solve problems and to recognize the connections between concepts using the Eight Mathematical Practices and meets all of the California Common Core State Standards. Units of study include relationships between quantities, linear and exponential relationships, reasoning with equations, descriptive statistics, congruence proof and construction and connecting Algebra and Geometry through coordinates. Integrated Mathematics I uses the Carnegie Learning curriculum, which is researched, based, promotes conceptual understanding, provides rigor and is in alignment with the Common Core State Standards.

72115 INTEGRATED MATHEMATICS 1 HONORS *UC APPROVED

GRADE LEVEL: 9, 10, 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of Math 8

Course Description: Integrated Mathematics 1 Honors is a 3-year course of study that blends Algebra, Geometry, Algebra II and Statistics. Its emphasis is on students building conceptual understanding and making connections across the mathematics spectrum. The pace, rigor and expectations for students in Integrated Mathematics I Honors are higher. Students will be assigned semester projects and be required to keep an interactive notebook. Areas of study include Quantities and Relationships, Graphs, Functions, Equations and Inequalities, Sequences, Systems of Equations and Inequalities, Mathematical Modeling, Data Analysis, Coordinate and Plane Geometry, Congruency and Logic. Integrated Mathematics I uses the Carnegie Learning curriculum, which is researched, based, promotes conceptual understanding, provides rigor and is in alignment with the Common Core State Standards.

72120 INTEGRATED MATHEMATICS 2 *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Integrated Math 1

Course Description: Integrated Math 2 is the second course in the three-course Integrated Mathematics series. This course focuses on increasing students' complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions.

72125 INTEGRATED MATHEMATICS 2 HONORS *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Integrated Math 1 honors or equivalent

Course Description: Integrated Math 2 honors is the second course in the three-course Integrated Mathematics Honors series. This course focuses on increasing students' complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions. As this is an honors course, students will be expected to analyze, synthesize and problem solve at a higher level. Advanced projects and problem-solving assignments will be used to encourage students to think more in-depth about the mathematical concepts.

72130 INTEGRATED MATHEMATICS 3 *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Integrated Math 2 or equivalent

Course Description: Mathematics 3 is the third course of a three-course integrated math sequence. For the Mathematics III course, instructional time will focus on the following critical areas: extend the laws of exponents to rational exponents; apply methods from probability and statistics to draw inferences and conclusions from data; expand understanding of functions to include polynomial, logarithmic, rational, and radical functions; expand trigonometry to include general triangles, radian measure, trigonometric functions whose domain is all real numbers; and consolidate functions and geometry to create models and solve contextual problems.
In this course, students delve deeper into the mathematics presented in Mathematics 2. Students are introduced to rational functions and learn to compare them to linear, exponential, and quadratic functions that were studied in Mathematics 1 and 2. Students will study trigonometric functions and apply this knowledge to model simple periodic phenomena. As students study higher mathematical topics, they focus on fluency and understanding of mathematical concepts graphically, numerically, algebraically, and verbally. This course pushes students to comprehend theoretical knowledge as well as applications of where and how they

will be able to use their math knowledge as a tool for problem solving. Students who successfully complete this course will be prepared to take AP Statistics, pre-calculus, or calculus.

72135 INTEGRATED MATHEMATICS 3 HONORS *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of Integrated Math 2 honors or equivalent

Course Description: Mathematics 3 Honors is the third course of a three-course sequence directly leading to Calculus by incorporating pre-calculus standards throughout the Mathematics III honors course. The instructional time will focus on the following critical areas: extend the laws of exponents to rational exponents; apply methods from probability and statistics to draw inferences and conclusions from data; expand understanding of functions to include polynomial, logarithmic, rational, and radical functions; expand trigonometry to include general triangles, radian measure, trigonometric functions whose domain is all real numbers; and consolidate functions and geometry to create models and solve contextual problems.

In this course, students delve deeper into the mathematics presented in Mathematics II. In Integrated Math 3 Honors Students will be immersed in a problem-solving environment that will allow them to consider solutions through algebraic, graphical or computer based, and tabular or recursive based evidence. Projects will be incorporated to develop a deeper understanding of the concepts and provide an additional challenge to the honors environment. Students are introduced to rational functions and learn to compare them to linear, exponential, and quadratic functions that were studied in Mathematics I and II. Students will study trigonometric functions and apply this knowledge to model simple periodic phenomena. As students study higher mathematical topics, they focus on fluency and understanding of mathematical concepts graphically, numerically, algebraically, and verbally. This course pushes students to comprehend theoretical knowledge as well as applications of where and how they will be able to use their math knowledge as a tool for problem solving. Students who successfully complete this course will be prepared to take AP Statistics, or calculus.

72845 AP PRECALCULUS *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of Integrated Math 3 or equivalent

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: AP Precalculus is designed to be the equivalent of a first semester college precalculus course. AP Precalculus provides students with an understanding of the concepts of college algebra, trigonometry, and additional topics that prepare students for further college level mathematics courses. This course explores a variety of function types and their applications—polynomial, rational, exponential, logarithmic, trigonometric, polar, parametric, vector-valued, implicitly defined, and linear transformation functions using matrices. Throughout the course, the mathematical practices of procedural and symbolic fluency, multiple representations, and communication and reasoning are developed. Students experience the concepts and skills related to each function type through modeling and engage each function type through their graphical, numerical, analytical, and verbal representations.

72860 AP CALCULUS AB *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion and strong performance in AP Precalculus
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: The AP Calculus AB course covers the basic concepts of Calculus, including limits of a function, continuity slops, multiple derivatives, and indefinite and definite integrals. Applications include the ability to compute area, volume, arc length, rate of change, related rates, force and work; all under dynamic conditions. Strong Algebra, Trigonometry and Geometry skills will be used to examine functions graphically, numerically, analytically, and verbally. The course will prepare students for the Calculus AB test which can earn college credits with successful scores.

72900 AP STATISTICS *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion and strong performance in Trigonometry honors
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: In this course students will develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid student in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. To develop effective statistical communication skill, students are required to prepare frequent written and oral analyses of real data.

72910 CONSUMER MATH *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: This course is an algebra-based, mathematical modeling course that will solve applications that occur in everyday financial life. The purpose of this course is to lay a foundation in both logical thinking and problem solving while applying these skills to everyday financial decisions. Students will expand gain a deeper understanding of Algebra I by directly relating standards and lesson rational numbers, algebraic expressions, analyzing and solving linear equations and inequalities, data analysis, probability, statistics, and polynomials. Students will learn skills to help them understand the cost of operating a vehicle, income, budgeting, buying and renting a home, filing taxes, banking, investments, and calculating business profits and losses. Students will investigate relationships between variables and solve problems using equations, graphs, and tables; specifically, they will do so through the lens of consumer mathematics. Students will then be able to apply these skills to real-life circumstances.

SCIENCE DEPARTMENT

PHILOSOPHY

Science is an important part of education in the life of each of our students. We encourage parents and students to keep in mind that studying science is not merely an excellent way to prepare for a career, but also represents an opportunity to gain a better understanding and a fuller appreciation of the world in which we live. Such knowledge protects us from being misled and allows us to make informed decisions. Informed decision-making must surely be one of the most vital responsibilities of citizenship in a democratic society.

GOALS

In each course, the Science Department provides:

1. A stimulating rigorous and thought-provoking curriculum
2. Investigations, laboratory experiences, outdoor activities and inquiry-based projects that emphasize the development of science-based skills (procedural knowledge), working within and among the greater community of scientists (i.e. with Mojave Water Agency, California Turtle and Tortoise Club, National Fish and Wildlife, California Department of Fish and Wildlife, NASA, JPL, BLM), critical thinking, and the scientific method
3. Encouragement to consider education as a lifelong experience
4. A scientific knowledge base (declarative knowledge) that will lead to successful career choices
5. Reasons to respect the balance between humanity and the natural environment
6. Opportunities to use a variety of technologies related to science.

COURSE OFFERINGS

- NGSS Earth Science
- NGSS Earth Science Honors
- NGSS Biology
- NGSS Biology Honors
- NGSS Chemistry
- NGSS Chemistry Honors
- NGSS Physics
- NGSS Physics Honors

COURSE DESCRIPTIONS

73154 NGSS EARTH SCIENCE *UC APPROVED

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of middle school science.

Course Description: Earth is our home planet and we rely on it for our existence in many different ways. This class is designed to serve as a general education science curriculum that focuses on planet Earth and its place in the Universe. The class is designed around the concept of Earth Science Literacy. An Earth Science literate person: Understands the fundamental concepts of Earth's many systems, is able to locate and analyze scientifically credible information about Earth, communicated=s about Earth Science in meaningful ways, and is able to make thoughtful informed and responsible decisions about Earth and its resources. Earth Science is part of the ongoing process of discovery of the natural world.

73155 NGSS EARTH SCIENCE HONORS *UC APPROVED

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of middle school science.

Course Description: Earth is our home planet and we rely on it for our existence in many different ways. This class is designed to serve as a general education science curriculum that focuses on planet Earth and its place in the Universe. The class is designed around the concept of Earth Science Literacy. An Earth Science literate person: Understands the fundamental concepts of Earth's many systems, is able to locate and analyze scientifically credible information about Earth, communicated=s about Earth Science in meaningful ways, and is able to make thoughtful informed and responsible decisions about Earth and its resources. Earth Science is part of the ongoing process of discovery of the natural world.

Required component to be completed each semester: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) activity that is determined through a written hypothesis and is problem/research-based, the resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype that could/would be entered in a school, county, state or special interest-based science competition.

73251 NGSS BIOLOGY *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion Earth Science and enrolled/completed Integ. Math 1

Course Description: High School Biology course is an introduction to biology and life science principles based on the Next Generation Science Standards (NGSS). The course will apply a 3-dimensional approach to learning as students cover five major units of study: matter and energy, structure and function of organisms, heredity, biological evolution, and ecosystems. Through the incorporation of science and engineering practices (SEPs), disciplinary core ideas (DCIs), and cross-cutting concepts (CCCs), students will perform specific learning targets or Performance Expectations (PEs.) to demonstrate understanding.

73253 NGSS BIOLOGY HONORS *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion Earth Science and enrolled/completed Integ. Math 1

Course Description: High School Biology course is an introduction to biology and life science principles based on the Next Generation Science Standards (NGSS). The course will apply a 3-dimensional approach to learning as students cover five major units of study: matter and energy, structure and function of organisms, heredity, biological evolution, and ecosystems. Through the incorporation of science and engineering practices (SEPs), disciplinary core ideas (DCIs), and cross-cutting concepts (CCCs), students will perform specific learning targets or Performance Expectations (PEs.) to demonstrate understanding.
Required component(s) to be completed each semester: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) activity that is determined through a written hypothesis
and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype that could/would be entered in a school, county, state or special interest-based science competition.

73352 NGSS CHEMISTRY *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion Biology and enrolled/completed Integ. Math 1

Course Description: This course studies the composition, structure, and properties of matter and the changes it undergoes. This will be a chemistry class based on using methods of scientific inquiry. The student learns and uses the metric system, thoroughly studies matter, learns atomic and molecular structures from the chemical bond approach, learns how compounds form and change, and studies the mathematical relationships of the chemical reaction. Ample laboratory time is given to supplement theoretical knowledge. The purpose of this class is to develop student's competence and confidence involving problems of a chemical nature through concrete as well as abstract methods using abstract thinking, strategies, and skills, students will complete a variety of written activities including weekly textbook and laboratory assignments.

73354 NGSS CHEMISTRY HONORS *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion Biology and enrolled/completed Integ. Math 1. Successful completion of Integ. Math 2 with a B or better.

Course Description: This course studies the composition, structure, and properties of matter and the changes it undergoes. This will be a chemistry class based on using methods of scientific inquiry. The student learns and uses the metric system, thoroughly studies matter, learns atomic and molecular structures from the chemical bond approach, learns how compounds form and change, and studies the mathematical relationships of the chemical reaction. Ample laboratory time is given to supplement theoretical knowledge. The purpose of this class is to develop student's competence and confidence involving problems of a chemical nature through concrete as well as abstract methods using abstract thinking, strategies, and skills, students will complete a variety of written activities including weekly textbook and laboratory assignments.

Required component(s) to be completed each semester: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) activity that is determined through a written hypothesis and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype that could/would be entered in a school, county, state or special interest-based science competition.

73452 NGSS PHYSICS OF THE UNIVERSE *UC APPROVED

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Integrated Math II (Required)

Course Description: This course is an introductory physics course designed to prepare students for physics concepts on a college level. The course is based on the Physics of the Universe course from the High School Three-Course Model of the California Department of Education's NGSS Framework. Students will employ the Science and Engineering Practices (SEPs) to investigate and build understanding of the Disciplinary Core Ideas (DCIs) and Cross-Cutting Concepts (CCCs) in order to achieve Performance Expectations (Pes) given the NGSS framework.

73454 NGSS PHYSICS OF THE UNIVERSE HONORS *PENDING UC APPROVAL

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Completion of Integrated Math II with a B or better (Required). Enrolled in Integrated Math III.

Course Description: This course is an introductory physics course designed to prepare students for physics concepts on a college level. The course is based on the Physics of the Universe course from the High School Three-Course Model of the California Department of Education's NGSS Framework. Students will employ the Science and Engineering Practices (SEPs) to investigate and build understanding of the Disciplinary Core Ideas (DCIs) and Cross-Cutting Concepts (CCCs) in order to achieve Performance Expectations (Pes) given the NGSS framework.

Required component to be completed each school year: a student-led, independent STEM (Science, Technology, Engineering, or Mathematics) project that is determined through a written proposal, a hypothesis and is problem-based / research-based inquiry. Near the end of the school year, the resulting product or products must be a (1) publishable report and/or a (2) competition ready experiment-based conclusion(s) and/or a (3) competition ready product/prototype.

SOCIAL SCIENCES DEPARTMENT

PHILOSOPHY

Helping students understand their relationship to the world, nation, and local community is the primary concern of the Social Science Department.

Courses in history and government are designed to broaden the individual's awareness of how various human social systems have developed and presently function.

GOALS

Students will develop a better understanding of:

1. Their obligation to the world, nation, and local societies to which they belong.
2. The interrelationships that exist between all peoples in the world – and the necessity that exists for cooperation between all peoples;
3. How our country has developed into a world leader and the obligations that go along with that status.

COURSE OFFERINGS

- World History Culture and Geography
- AP World History
- United States History
- AP US History
- American Government
- AP American Government
- Personal Finance
- Socio Political History of Rock n Roll - UC Approved Elective
- AP Human Geography – UC Approved Elective
- Psychology – UC Approved Elective

COURSE DESCRIPTIONS

74250 WORLD HISTORY, CULTURE & GEOGRAPHY *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

Course Description: This course provides an in-depth study of World History from the Enlightenment to the 1960's. Students will study Western and non-western cultures with stresses in critical thinking, analytical skills, and exploring primary and secondary sources with emphasis on writing. Political, geographic, social, and cultural events are incorporated into the historical cause and effects. The main themes of the 10th grade World History will be: 1The Enlightenment and its effect on democracy, which include readings from the great Enlightenment thinkers. 2 The rise of industrialization and its impact on society and various cultures and how the rise of global industrialization developed the different political, economic, and artistic thoughts. 3 The conquest of the world by western countries and the spreading of Western thought and economies through imperialism and the competition for these colonies. 4 The causes, development, and results of WWI in terms of the governments' implementation of total war, the heroic efforts of the individual soldiers, and the modernization of military. 5 The rise of totalitarianism as a result of WWI, the Great Depression and the development of the demise of the relationship between democracies and totalitarianism. 6 The causes, course, and results of WWII in terms of the magnitude of war, technology, and crimes committed during the war, and the major theaters of the war. 7 The Cold War and the policies instituted as a result of the different ideologies between capitalists and communists (example: Korea and Vietnam).

74265 AP WORLD HISTORY *UC APPROVED

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion and strong performance in college prep courses

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: In this course students will investigate significant events, individuals, developments, and processes in historical periods ranging from approximately 8000 B.C.E. to the present. Students will analyze primary and secondary sources, develop historical arguments; make historical comparisons; and use reasoning about contextualization, causation and continuity and change over time. Students will explore five themes throughout the course making connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansions, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

74350 UNITED STATES HISTORY *UC APPROVED

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

Course Description: This course provides an in-depth study of US History and the major events of the 20th century. Following a review of the nation's beginning and the impact of the Enlightenment of US democratic ideals, students build upon their study of 10th grade global industrialization and understand the emergence and impact of new technology and a corporate economy, including its social and cultural effects. Students will examine the emerging role of the US as a world power (example: World War I, World War II). The internal struggle of the US in its movement towards equal rights for racial minorities and women. The change in the ethnic composition of American society. The expanding role of the federal government and federal

courts in American society. Philosophy: Helping students to understand their relationship to the world, nation, and local community is a primary concern of the Social Science Department. Courses in history and government are designed to broaden the individual's awareness of how various human social systems have developed and presently function.

74360 AP US HISTORY *UC APPROVED

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Strong performance in previous college prep courses.
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.

74450 AMERICAN GOVERNMENT *UC APPROVED

GRADE LEVEL: 12 COURSE LENGTH: Semester CREDITS: 5 per semester
Prerequisites: None

Course Description: Students will look at government beyond the textbook. Studies will be structured to evaluate government from a problem area approach that will break our Federal system down into sections of study (the legislative process, role of the Supreme Court, political parties, foreign affairs, etc.). Individual research and supplementary reading will be required, and students will tie their previous knowledge of United States and the World History to the problems and successes of our American system of Government. Students will take a detailed academic journey into the study of the representative republican form of democracy known as the United States of America, from 1585 to present. Students will read and demonstrate an understanding of the Mayflower Compact, selected readings from the Federalist Papers, the Constitution, Declaration of Independence, Bill of Rights and other historic documents. They will demonstrate academic Knowledge of the historic, economic, political and religious influence associated with this time period and the ramifications these actions incorporated into the fabric of American life. This course requires a higher level of written and oral expression than most classes and is designed to be helpful in preparing students for college and for life as American Citizens.

74460 AP AMERICAN GOVERNMENT *UC APPROVED

GRADE LEVEL: 12 COURSE LENGTH: Semester CREDITS: 5 per semester
Prerequisites: Strong performance in previous college prep courses.
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: This course provides an analytical perspective on government and politics in the United States. The course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality.

74550 PERSONAL FINANCE *UC APPROVED

GRADE LEVEL: 12 COURSE LENGTH: Semester CREDITS: 5 per semester

Prerequisites: None

Course Description: This course will introduce students to the economic concepts of scarcity and opportunity cost as they relate to personal finance. Students will explore career goals and the pathways to achieve those goals. Students will evaluate the earning potential of chosen career fields and how those earnings are related to the scarcity of skills demanded in the labor force. In depth instruction in analyzing costs and benefits will be incorporated in lessons throughout the course including budgeting, fraud, financial systems, saving and investment, taxes, and post-secondary education options.

74945 SOCIO POLITICAL HISTORY OF ROCK AND ROLL *UC APPROVED ELECTIVE

GRADE LEVEL: 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

Course Description: This course is designed for the student who has a deep interest in learning about the History of Rock & Roll and its important role in shaping American culture from its earliest beginnings to the present day. Using American History as a cultural backdrop this course will focus on the connection between music and social trends throughout the 20th and 21st centuries. This course surveys the inception, evolution, and development of rock music and the artists who created it. Students will examine the sociological, political and economic conditions which influenced the development of Rock & Roll. The musical genres of study will include blues, boogie-woogie, jazz, swing, gospel, country and rhythm & blues that marked the birth of Rock & Roll. In addition, students will study the musical and social trends of the 1960's, including the influence of the British Invasion, the social upheaval of the late 1960's and the changes in Rock & Roll during the seventies, eighties, and nineties. This course will culminate in an exploration of today's current musical trends and icons including rap and hip hop.

74915 AP HUMAN GEOGRAPHY * UC APPROVED ELECTIVE

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Course Description: Students will explore how humans have understood, used and changed the surface of Earth. Learn to connect geographic concepts and processes to real-life scenarios, recognize patterns and trends in data and in visual sources such as maps and drawing conclusions from them. Understand information shown in maps, tables, charts, graphs, infographics, images and landscapes.

74950 PSYCHOLOGY *UC APPROVED ELECTIVE

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Course Description: This is a year-long elective course. In this course, students are introduced to the basics in Psychology. During this year-long course, students will be expected to gain a basic understanding of some of the fundamentals in Psychology in hopes that they will be familiar with terms and concepts if taking a similar introductory course in college. Topics covered will include but are not limited to: human behavior and development, the scientific method in Psychology, surveys, collecting data, analyzing results, sensation and perception, consciousness,

learning, memory, cognition, intelligence, personality, social influences, motivation, abnormalities, and psychological disorders.

ELECTIVES

AP Capstone

AP Capstone™ is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

AP Capstone is comprised of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the discipline-specific study in other AP courses. Participating schools can use the AP Capstone program to provide unique research opportunities for current AP students, or to expand access to AP by encouraging students to master the argument-based writing skills that the AP Capstone program develops. Completion of the two AP Capstone courses with a score of 3 or higher on the exam, plus the passing of four additional AP courses with a score of 3 or higher on the exams during a high school career will earn the student an AP Capstone Diploma. AP Seminar is designed for juniors and AP Research for seniors. Seniors may take AP Research without AP Seminar as a prerequisite but recognize the AP Capstone diploma could no longer be earned. The courses may not be taken concurrently.

75550 AP CAPSTONE SEMINAR *UC APPROVED ELECTIVE

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: None

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: AP Seminar is a year-long course that has students investigate real-world issues from multiple perspectives. Students learn to synthesize information from different sources, develop their own lines of reasoning in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team.

75555 AP CAPSTONE RESEARCH *UC APPROVED ELECTIVE

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Successful completion of AP Capstone Seminar

AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

ASSOCIATED STUDENT BODY (ASB)

The Student Leadership Class is required for all elected or appointed student officers as outlined in the Associated Student Body's Constitution. It affords practical experience in democratic leadership through management of student government. It provides opportunities to study the meaning and techniques of parliamentary procedures, state law, school finance (problems of income and expenditures), group processes, the objectives of the American Education system, the principles of human behavior, and the many challenges of school administration. Furthermore, it affords student leaders opportunities to develop and practice speaking and writing skills; to improve in peer relationships; to work with peers of diverse backgrounds and attitudes; to recognize the necessity of courtesy, poise, and appearance; to share responsibilities with adults; and, to develop a further appreciation for law and order. Student leadership class provides for self-evaluation and for evaluation of individual and group activities.

79310 ASSOCIATED STUDENT BODY

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: By application

Course Description: This course will equip students to be leaders that are capable of communicating with others, making decisions, meeting deadlines and promoting ideas. Students will learn to be responsible citizens in the community through volunteer service learning projects.

VISUAL AND PERFORMING ARTS DEPARTMENT

Performance and Presentation Standards

As the visual and performing arts department has grown, we have become increasingly aware that groups and students that perform or produce artistic elements at the Academy for Academic Excellence are representing the school and need to be accountable for a high level of performance. Therefore, we have adopted the general standard of "Quality, not Quantity" for all performances and artistic creations, both on and off campus. The policy terms are as follows:

1. Not all VPA classes are deemed performance groups, such as dance, strings, keyboard, guitar, art and some components of drama. They *may* perform at the teacher's discretion.
2. Choir and Band are performance groups.
3. Cancellations may be necessary for groups not ready to perform with excellence.
4. Performing is a privilege for hard working students. Individual instructors will provide alternate assignments for students who have not met performance standards.
5. VPA staff has the freedom to give informative feedback into each other's programs as a check and balance for quality and appropriateness.
6. Students will NOT be allowed to perform at any visual and performing arts event without prior screening of the performance by the instructor. No exceptions!
7. Disciplinary action may be taken against any student who performs an unauthorized act or actions at any VPA event.
8. It is our goal to produce shows of quality and be mindful of program length. Again, our goal is quality, not quantity.
9. Teachers will develop high standards of performance for each of their applicable classes and make students aware of expectations.
10. The VPA Academic Lead and/or the Principal/Vice Principal will make the final decision in regards to appropriateness.

ART PROGRAM

Philosophy

Art is a vital and vibrant part of education. All of the art courses offered provide students with the opportunity to develop deeper knowledge and skills in art, and are designed to build from one year to the next starting in middle school. The art program is designed to promote creativity, problem solving, self-expression, and an appreciation for the arts. Students will have the opportunity to experience many different art media in their chosen class, and develop their personal artistic style. Throughout their experience students will build a knowledge and understanding of art history, influential artists, art vocabulary, color theory, and the elements of art and principles of design through the study and application of the learned concepts.

GOALS

Art students will be assisted to develop:

1. Their own creative and self-expressive style.
2. Problem solving and brain storming skills.
3. A lasting understanding and application of art vocabulary and learned skills.
4. Creative and communicative skills resulting in original works of art.
5. Skills, experience, and knowledge in regards to art materials and several tools.
6. An appreciation of art history and knowledge of past and current artists, art movements, and art styles.
7. An understanding of how art influences other curricular subjects as well as in their personal lives.
8. Responsibility and time management in the pursuit of meeting set deadlines.
9. A solid foundation in art and creative expression, which prepares the student for college level art courses and personal artistic pursuits.

All art classes are year courses. Students may enroll in more than one art course only with the approval of the counselor, parent, and teachers involved.

The art faculty feels that it may not be in students' best interest if they repeat the same course at the same level of class. Student are encouraged to pursue a 2nd level (drawing II, painting II, or sculpture II) if a subject is repeated.

Some Art courses are offered as combinations classes. When this happens, the class will be structured to include both art disciplines. All students will be required to work on all projects as outlined and presented by the teacher in combined courses.

COURSE DESCRIPTIONS

76310 INTRODUCTION TO ART *UC APPROVED

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: This is an intermediate course, which is designed to build on the skills the student learned in Sculpture I. The student will continue the discipline and exploration of sculpture and various sculpture media. Students will refine their application of 2-D crossovers, color theory, elements of art, and principles of design while making personal and creative choices. The students will build on previously learned 3-D art skills and art movements, styles, and history, while developing a personal style through creative expression. The students will also develop and explore new skills and materials by applying these to new creative challenges and projects.

76350 PAINTING I *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: This course is designed for students who want to learn to paint through simple exercises and gradual skill building assignments. The student will develop their visual perception and creative abilities and further their study in composition, elements of art and principles of design. The course will emphasize the basic elements of color as it relates to painting and some basic drawing skills. The course will also focus on color theory, color mixing, paint manipulation, and the application of the elements of art and principles of design while creating original works of art. The students will explore various painting techniques through the use of ink, acrylic paint, and watercolor paint. Students will also explore and apply the knowledge of art history, art movements, and influential artists of the past and present.

76355 PAINTING II *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Painting I

Course Description: This intermediate course is designed to continue the discipline of painting for the students, and refine their painting skills, application of color theory, elements of art, and principles of design. The students will build on previously learned 2-D art skills and art movements, styles, and history, while developing a personal style through creative expression. The students will also develop and explore new skills and materials by applying these to new creative challenges and projects, while using acrylic paint, oil paint, watercolor paint, as well as stretched canvas.

76356 PAINTING III

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Painting II

Course Description: This course is designed for students with a solid painting foundation and can demonstrate knowledge of 2-D art skills, art vocabulary, color theory, and the elements of art and principles of design. Students should also be proficient in several drawing and painting techniques as well as art history, artists, and movements. Student should be able to work independently on teacher directed and self-developed projects. Students will experience college level responsibilities when developing and producing their artwork by selecting and executing projects in their preferred materials, by making personal creative choices, and in meeting set

deadlines. Students completing this course should be able to move onto college level courses with the necessary knowledge and experience to participate beyond a high school level.

76380 SCULPTURE *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Introduction to Art preferred, but not required.

Course Description: This course is designed to provide the student a basic knowledge of three-dimensional artwork through various 3-D media such as clay, plaster, found objects, and other sculpture materials. Students will explore additive and subtractive building methods in various materials as well as other building techniques. Students will explore the elements of art, principles of design, color theory, and 2-D crossovers as it pertains to sculpture. Students will learn about the history of sculpture and ceramics as it pertains to several art movements and influential artists past and present.

76385 SCULPTURE II *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Sculpture I

Course Description: This is an intermediate course, which is designed to build on the skills the student learned in Sculpture I. The student will continue the discipline and exploration of sculpture and various sculpture media. Students will refine their application of 2-D crossovers, color theory, elements of art, and principles of design while making personal and creative choices. The students will build on previously learned 3-D art skills and art movements, styles, and history, while developing a personal style through creative expression. The students will also develop and explore new skills and materials by applying these to new creative challenges and projects.

76390 SCULPTURE III

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Sculpture II

Course Description: This course is designed for students with a solid sculpture foundation and can demonstrate knowledge of 3-D art skills, art vocabulary, color theory, and the elements of art and principles of design as it pertains to sculpture. Students should also be proficient in several sculptural building techniques as well as art history, artists, and movements. Student should be able to work independently on teacher directed and self-developed projects. Students will experience college level responsibilities when developing and producing their artwork by selecting and executing projects in their preferred materials, by making personal creative choices, and in meeting set deadlines. Students completing this course should be able to move onto college level courses with the necessary knowledge and experience to participate beyond a high school level.

76962 AP 2-D ART AND DESIGN *PENDING UC APPROVAL

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Intro to Art or Drawing or Painting recommended.
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: The AP 2-D Art and Design is an introductory college-level two-dimensional design course. Students refine and apply 2-D skills to ideas they develop throughout the course. Students create a portfolio of work to demonstrate inquiry through art and design and

development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions.

MUSIC PROGRAM

PHILOSOPHY

Music is an important facet of education. All are touched daily by music and course offerings are designed to provide students with the opportunity to better understand the history, creation, and performance thereof. Courses are designed to promote a better understanding of the place of music in history, including the various national, regional, and cultural contributions to this art form; to provide students with the physical and interpretive skills necessary for personal and group performance, and to enhance an enlightened appreciation for all musical literature.

Please note: Only choir and band are considered musical "performance groups." Other classes, however, may give recitals and concerts at the instructor's discretion. The VPA department adopted the Performance Standards in Spring 2005. Students and/or groups that do not meet these standards will be given alternative assignments by their instructor in lieu of performing.

GOALS

1. Music students will be assisted to develop:
2. An enhanced respect for the creative process
3. A more sophisticated aural and emotional sensitivity in the listening and performing process.
4. A heightened ability in physical and manipulative coordination through learning an instrument
5. An understanding of the independent and interdependent responsibilities of students involved in the various music performance organizations
6. A lifelong appreciation and educated enjoyment of all forms, styles, and periods of music.

COURSE DESCRIPTIONS

76105 BEGINNING BAND

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Purchase of "Essential Elements 2000" and instrument purchase/rental is required.

By application. NOTE: Students entering the class after the first four weeks of the fall semester will need to pass an audition. Beginning students are ONLY accepted at the beginning of the fall semester without an audition.

Course Description: Beginning Band is an opportunity of students to learn traditional band instruments in preparation for Marching/Concert Band. Students will learn correct posture, breathing, embouchure, music reading, and ensemble playing techniques. Marching skills will also be taught. Instruments offered are: clarinet, flute, trumpet, and trombone. (Snare drum is offered, but limited to 2 students per year.) Important note: guitar, piano, drum set, and advanced band instruments, such as french horn, oboe, bassoon, and tuba are NOT offered in beginning band.

76110 CONCERT BAND/MARCHING BAND *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Purchase of some uniform elements is required, as are some transportation expenses. Students must provide their own instruments.

By Application. At least one-year prior experience playing an instrument with a minimum proficiency as evidenced by the successful completion of *Essential Elements 2000*, Book 1, OR the equivalent OR successful completion of a beginning band class with the grade of "B" or better OR audition by the instructor. In addition to the above requirements, a student may be asked to pass an audition.

Course Description: Concert/Marching band is an opportunity for students to perform instrumental music with their peers, while sharing the joy and rewards of working together musically. Along with developing individual self-confidence and creativity, playing in the group will give the student the understanding of how
commitment and dedication leads to success. The students will learn to recognize musical terms and
forms, in addition to furthering their music reading ability. Concert/Marching Band is a performing group. Students are required to participate in all parades, performances and festivals. Only traditional Concert and Marching Band instruments are allowed in the group. Students must supply their own instruments. Marching is mandatory.

76115 CONCERT BAND/MARCHING BAND HONORS *UC HONORS APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Purchase of some uniform elements is required, as are some transportation expenses. Students must provide their own instruments.

By Application. At least one-year prior experience playing an instrument with a minimum proficiency as evidenced by the successful completion of *Essential Elements 2000*, Book 1, OR the equivalent OR successful completion of a beginning band class with the grade of "B" or better OR audition by the instructor. In addition to the above requirements, a student may be asked to pass an audition.

Course Description: Concert/Marching Band Honors is an opportunity for students to perform instrumental music with their peers, while sharing the joy and rewards of working together musically. Along with developing individual self-confidence and creativity, playing in the group will give the student the understanding of how commitment and dedication leads to success. The students will learn to recognize musical terms and forms, in addition to furthering their music reading ability. Concert/Marching Band is a performing group. Students are required to participate in all parades, performances and festivals. Only traditional Concert and Marching Band instruments are allowed in the group. Students must supply their own instruments. Marching is mandatory.
Honors Final Exam: At the end of the year, there will be a final project. Students will choose a specific composer that they found particularly interesting. Students will choose a composition by that composer that was not covered in class and study it. After the Spring Band Concert, he/she will teach it to the band, rehearse it using techniques covered during the year, i.e., balance, key signature(s), tone quality, dynamics, etc. Finally, he/she will conduct the band in front of current music faculty.

76118 JAZZ BAND WITH HONORS *UC HONORS APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Purchase of some uniform elements is required, as are some transportation expenses. Students must provide their own instruments.

Course Description: Jazz Band with Honors is a yearlong, ensemble-based course designed for students who desire to obtain an in-depth study of instrumental jazz performance. Students will receive advanced instruction in instrumental development and technique, advanced sight-reading, music theory, and improvisation. A wide variety of music genres and jazz ensemble repertory will be presented. Student will learn stylistic interpretation, performance practices, critical analysis and observation techniques, aesthetic sensitivity, and assume advanced leadership responsibilities. Students will also learn advanced ear training, pitch discrimination, and tonal blend and balance to perfect the total sound of the group. Members of this class will participate in solo and ensemble playing. Performance is a major component of this class. Material and repertory are directly related to performance and attendance at all performances is mandatory.

76210 CONCERT CHOIR *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: Purchase of choir outfits may be required, as well as performances outside of the regular school day.

Course Description: The chorus performs beginning, intermediate, and advanced level literature from various selected areas of styles. In addition to the techniques of rehearsal and

performance, the student will know something about the music performed. The director schedules required performances.

76910 GUITAR I *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Students must provide a steel or nylon string acoustic guitar of acceptable quality. NO electric guitars! Please do not purchase instrument before first consulting with the instructor!

Course Description: Students will discover the world of music through learning basic guitar skills. Participants will learn to interpret music through vocabulary, historical context, chord structure, strumming patterns, accompaniment techniques and essential music reading.

76920 GUITAR II *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Guitar I. Students must provide a steel or nylon string acoustic guitar. Electric guitars are not recommended.

Course Description: This is an advanced beginner/intermediate guitar class. Participants will learn to interpret music through vocabulary, historical context, chord structure, strumming patterns, finger picking, accompaniment techniques and essential music reading.

76140 STRINGS I *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Students must provide their own instrument or rent one from the AAE for $65 per semester. NOTE: Students entering the class after the first four weeks of the fall semester will need to pass an audition. Beginning students are ONLY accepted at the beginning of the fall semester without an audition.

Course Description: The study and performance of standard string literature composed for the beginning level string player. Musical terminology, rhythmic figures and basic reading skills will be learned. Proper left-hand position, bow technique, and musical performance practices will be emphasized. In addition to the techniques of rehearsal and performance, the students learn music theory and may be required to participate in performances. Instruments being offered are violin, viola, cello and bass.

76150 STRINGS II *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Strings I

Students must provide their own instrument or rent one from the AAE for $65 per semester. NOTE: Students entering the class after the first four weeks of the fall semester will need to pass an audition. Beginning students are ONLY accepted at the beginning of the fall semester without an audition.

Course Description: The study and performance of standard string literature composed for the intermediate level string player. Musical terminology, rhythmic figures and intermediate reading skills will be learned to further enhance this experience. Proper left-hand position bow technique, and musical performance practices will be emphasized. In addition to the techniques

of rehearsal and performance, the students learn music theory and may be required to participate in performances. Instruments being offered are violin, viola, cello and bass. The course may be repeated for additional credit.

76930 PIANO I *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Student must have a touch-sensitive keyboard of at least five octaves or a piano to practice on at home. No organs.

Course Description: Students will discover the world of music through learning basic piano keyboard skills. Participants will learn to interpret music through vocabulary, historical context, rhythmic figures, accompaniment techniques and essential music reading. Regular music history and theory lessons will be given. The class will culminate in a yearly public recital.

76940 PIANO II *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Successful completion of Piano I.

Student must have a touch-sensitive keyboard of at least five octaves or a piano to practice on at home. No organs.

Course Description: This course provides intermediate and advanced piano instruction. Participants will learn more advanced methods of interpreting music through vocabulary, historical context, rhythmic figures, accompaniment techniques and essential music reading. Music theory and history will also be explored, as well as sight reading and chord reading. The class will culminate in a yearly public recital.

VIDEO PRODUCTION PROGRAM

PHILOSOPHY

The Video Production program offers students the opportunity to gain insights into the technical and performance aspects of video production. Course work is designed to take students through the steps necessary to videotape, edit and produce a video for the Evening of the Arts program each year. Students wishing to go on in this field can use their video productions as part of their portfolio. Students prepare and submit a resume listing those abilities, skills, and insights into video performance and production gained from this course of study.

COURSE DESCRIPTIONS

76759 CTE VIDEO 101: Introduction to Film & Video Production *PENDING UC APPROVAL

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Ability to work maturely with minimal supervision in a small group.

Course Description: Video Production is a creative, fine art course that integrates Visual Performing Arts Standards with the Career Technical Education (CTE) Design, Visual, and Media Arts Pathway Standards. In this course, students explore the world of digital video and film production through hands-on projects, research, writing, and discussion. Aligned with the California Fine Arts Content Standards for Advanced Visual Art (grades 9-12) and designed to prepare students for postsecondary education and careers in film and media, the course emphasizes technical proficiency, creative storytelling, and critical analysis of film as an art form. As one of three courses required for the CTE certificate, Video 101 builds a strong foundation in both artistic expression and the technical practices essential to the film and media industries

76760 CTE VIDEO 201 H: Intermediate Film & Video Production*PENDING UC APPROVAL

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Completion of Video 101. Ability to work maturely with minimal supervision in a small group.

Course Description: Advanced Video and Film CTE (Honors) is the capstone class in the Video and Film pathway. Building on competencies developed in the concentrator course, this course follows CA Visual Arts VAPA, NCAS, and the Design, Visual, and Media Arts Standards from the Arts, Media and Entertainment Sector of the California CTE standards. Students will engage in advanced production processes, complex narrative projects, sophisticated special effects, and industry-level production management. Through in-depth studies of film genres-including auteur-driven narratives, experimental works, and both historical and futuristic styles-students will refine their technical skills and creative vision to produce mastery-level films that meet real-world standards.

76763 CTE VIDEO 301H CAPSTONE: Advanced Film & Video Production*PENDING UC APPROVAL

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Completion of CTE Video 201H. Ability to work maturely with minimal supervision in a small group.

Course Description: Advanced Film and Video Production is the capstone course in the Video and Film pathway, culminating in a CTE certification. This course-aligned with CA Visual Arts VAPA, NCAS, and the Arts, Media, and Entertainment Sector of the California CTE Model Curriculum Standards-pushes students to master the art and craft of television series production. Emphasizing complex storytelling, advanced production techniques, and professional industry practices, students will explore the creative processes behind writing, preproduction, production, postproduction, ad distribution of television series. With a focus on real-world applications such as pitching ideas, live TV practices, and festival management, this course prepares students for the competitive media industry while reinforcing technical, creative, and managerial competencies.

76765 CTE DOCUMENTARY FILMMAKING: Community Outreach & Journalism
*PENDING UC APPROVAL

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Completion of CTE Video 201H. Ability to work maturely with minimal supervision in a small group.

Course Description: Documentary Filmmaking is an advanced, hands-on course designed for students passionate about journalism, community engagement, and non-fiction storytelling. In this course, students collaborate with campus clubs, organizations, and local communities to craft compelling documentaries that capture real-world issues. The course also documents the activities of the Video Production program and the launch of a revitalized Film Festival. Over the semester, students complete projects covering every phase of documentary production-from rigorous preproduction planning and live interviews to advanced editing and digital distribution-while exploring diverse documentary styles and meeting CTE standards.

PHYSICAL EDUCATION

PHILOSOPHY

Physical Education is a vital element in a comprehensive, well-balanced educational program. A positive learning experience in physical education can be a major contributing factor in the optimum development of an individual in all aspects of life: physical, emotional, mental and social.

See VPA for the following courses that may be used to satisfy Physical Education credits

- Concert Band & Concert Band Honors

See Space Force ROTC for the following courses that may be used to satisfy Physical Education credits

- SFJROTC 1 or 1H, SFJROTC 2 or 2H, SFJROTC 3 or 3H, SFJROTC 4 or 4H

Awarding of PE Credit for Participation in Varsity Athletics

- Students who participate in a school-sponsored, varsity athletic sport may be granted PE credit for part of their physical education requirement for graduation. Students may earn credit for one semester of physical education by successfully completing one season of a varsity athletic sport. Students successfully completing a full season of varsity athletics will earn five physical education credits for their participation in each season of sport, grades 10-12, up to a maximum of 10 credits. A full season is the ability to participate physically in over 80% of the practices and games. A student who misses 20% or more of scheduled practices and games will not be eligible for this option. Students must remain academically eligible during the entire season to earn credit. This credit will be recorded on the student's transcript when the Counseling department receives a signed contract from the athlete that has been verified by both the Athletic Director and coach. A-F letter grades will not be issued. Instead, the grade will be recorded as P (Pass) and 5 credits will be posted to the student's transcript. There will be no GPA weight assigned and this form of PE credit will not be included in GPA calculations.
- Twenty credits of Physical Education are required for graduation. However, students may earn PE credit based on participation in a varsity athletic sport. This includes participation in the

following programs: tennis, volleyball, cross-country, golf, basketball, soccer, baseball, track & field, softball, and cheer. Students may also earn Physical Education credit for Marching Band and SFJROTC.

- ***By state law, all 9th grade students will be required to take 10 credits of 9th grade General PE or participate in either Concert Band or SFJROTC.

COURSE DESCRIPTION

77120 PHYSICAL EDUCATION

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: This class is designed to fulfill the state requirements for Physical Education at the high school level. This course combines various forms of movement and fitness education, along with multiple opportunities to learn and play individual and team sports within the physical education class (i.e. movement concepts, basketball, volleyball, football, tennis, fitness training), classroom lessons will also be a vital part of the course throughout the semester. National Content Standards in Physical Education will be the focus of this course.

SPACE FORCE JUNIOR ROTC DEPARTMENT

PHILOSOPHY

United States Space Force was formally established in December 2019. In March 2021, the AAE Air Force Junior Reserve Officer Training Corps program was one of ten school programs selected out of 900 worldwide to convert to Space Force Junior ROTC (SFJROTC). AAE is the only California school as well as the only charter school in the world to be selected. The official conversion takes place during fall 2021 and opens up many new opportunities. Because of our NASA/Space Force connection, students should consider enrolling in AAE SFJROTC. AAE grades 9-12 students earn credit toward high school graduation by taking SFJROTC classes as SFJROTC cadets. The AAE SFJROTC program motivates students to pursue a college degree. It makes them competitive for attendance at the five service academies. It makes them competitive for an ROTC scholarship at the college or university they choose to attend. SFJROTC even makes them more qualified should they choose to go directly into the military after high school (especially US Space Force). The US Space Force supports this effort by providing uniforms, equipment, funding and instructors to AAE.

GOALS

1. To develop citizens or character, dedicated to serving our nation and your communities.
2. To excel in knowledge; be challenged both academically and physically; to encourage a sense of adventure; while having fun.
3. To instill values of citizenship, service to the United States, personal responsibility, and sense of accomplishment in high school students.

COURSE OFFERINGS

NOTE: SFJROTC courses are offered by the SFJROTC department and are for SFJROTC cadets only.

- SFJROTC 1: The Science of Leadership 1
- SFJROTC 1H: The Science of Leadership 1 Honors
- SFJROTC 2: The Science of Leadership 2
- SFJROTC 2H: The Science of Leadership 2 Honors
- SFJROTC 3: The Science of Leadership 3
- SFJROTC 3H: The Science of Leadership 3 Honors
- SFJROTC 4: The Science of Leadership 4
- SFJROTC 4H: The Science of Leadership 4 Honors
- SFJROTC 6H: Management of the Cadet Corps Honors
- SFJROTC Special Teams
- SFJROTC Cadet Senior Staff
- SFJROTC Academic Honor Society – Kitty Hawk Space Society

DEPARTMENT POLICIES

1. The mandatory SFJROTC activities are planned to take place during school hours, not before or after school. There is **NO** obligation whatsoever to join the military. SFJROTC is a great opportunity for AAE students to take a look at the military lifestyle with no strings attached. The only obligation is willingness to proudly wear the US Space Force uniform to school at least once a week.
2. Cadets will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:
    a. Creating individualized training programs based on national standards by age and gender
    b. Identifying areas of improvement for each student
    c. Incorporating a physical training program for each student to reach their goal
    d. Develop a personal nutritional plan for each student, promoting healthy eating habits

COURSE DESCRIPTIONS

77315 SFJROTC 1: THE SCIENCE OF LEADERSHIP

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: SFJROTC 1 includes three tracks of instruction: Space Science (SS); Leadership Education (LE) and Wellness. A summary of each follows:

Leadership Education 100 – Citizenship, Character, and Tradition: The purpose of this class is to help students make a successful transition into the high school environment, and to provide an introduction to the Space Force Junior Reserve Officer Training Corps (SFJROTC) program. Studies include Space Force customs and courtesies; the importance of attitude, discipline, and respect; individual self-control; effective stress management; study skills, effective note taking practices, and time management techniques; concepts related to health promotion and disease prevention; learning the resources to make healthful dietary decisions; first aid; skills needed to make healthy life choices (as it relates to tobacco, alcohol, and drug use); and a study of the privileges of citizenship in the United States.

- **Space Science 100 – Space History:** This class provides a study of the history of space exploration, both civilian and military. These studies will include learning about people's first attempts to study space; how wars brought about the development of space capabilities; the U.S. policy of containing the spread of communism and the role of space power in that effort and the peaceful roles and missions that space power plays in support of national objectives, all leading to the formation of the United States Space Force.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTES: This class satisfies one year of elective credit OR one year of the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77316 SFJROTC 1 HONORS: THE SCIENCE OF LEADERSHIP 1 HONORS

GRADE LEVEL: 9 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Senior Space Science Instructor approval

Course Description: SFJROTC 1 includes three tracks of instruction: Space Science (SS) Honors; and Leadership Education (LE) Honors and Wellness. A summary of each follows:

Leadership Education 100 Honors - Citizenship, Character and Tradition Honors: The purpose of this class is to help students make a successful transition into the high school environment, and to provide an introduction to the Space Force Junior ROTC program. Studies include Space Force customs and courtesies; the importance of attitude, discipline, and respect; individual self-control; effective stress management; study skills, effective note taking practices, and time management techniques; concepts related to health promotion and disease prevention; learning the resources to make healthful

dietary decisions; first aid; skills needed to make healthy life choices (as it relates to tobacco, alcohol, and drug use); and a study of the privileges of citizenship in the United States.

Space Science 100 Honors – Space History Honors: This class provides a study of the history of space exploration, both civilian and military. These studies will include learning about people's first attempts to study space; how wars brought about the development of space capabilities; the U.S. policy of containing the spread of communism and the role of space power in that effort and the peaceful roles and missions that space power plays in support of national objectives, all leading to the formation of the United States Space Force

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

Required Component(s) to be completed in order to earn Honors credit: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) outside research activity that is determined through a written hypothesis and/or assigned by the instructors and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype; AND students attend Cadet Leadership Camp.

NOTE: This class satisfies one year of elective credit OR one year of the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77325 SFJROTC 2: THE SCIENCE OF LEADERSHIP 2

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisites: SFJROTC 1 or 1H (This prerequisite may be waived at the discretion of the Senior Space Science Instructor)

Course Description: SFJROTC 2 includes three tracks of instruction: Space Science (SS); Leadership Education (LE) and Wellness. A summary of each follows:

Leadership Education 200 – Communication, Awareness, and Leadership: The purpose of this class is to teach students how to listen to others, think critically, write and speak effectively, and apply what they have learned to their personal development. Students will also study the development of individual personalities, and the dynamics of group behaviors. Continued instruction on the enhancement of Leadership and Management skills is also provided.

Space Science 200 – Cyberspace: This class will introduce students to cyberspace, examine cyber threats to U.S. space assets, cover the principles of cybersecurity and look at the cybersecurity policies of the US military and government, including the Homeland Security and DoD Cyber Strategy.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTES: This class satisfies one year of elective credit OR one year of the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77326 SFJROTC 2 HONORS: THE SCIENCE OF LEADERSHIP 2 HONORS

GRADE LEVEL: 10 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: SFJROTC 1 or 1H (This prerequisite may be waived at the discretion of the Senior Space Science Instructor)

Course Description: SFJROTC 2H includes three tracks of instruction: Space Science (SS); Leadership Education (LE) and Wellness. A summary of each follows:

Leadership Education 200 – Communication, Awareness, and Leadership: The purpose of this class is to teach students how to listen to others, think critically, write and speak effectively, and apply what they have learned to their personal development. Students will also study the development of individual personalities, and the dynamics of group behaviors. Continued instruction on the enhancement of Leadership and Management skills is also provided.

Space Science 200 – Cyberspace: This class will introduce students to cyberspace, examine cyber threats to U.S. space assets, cover the principles of cybersecurity and look at the cybersecurity policies of the US military and government, including the Homeland Security and DoD Cyber Strategy.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

Required Component(s) to be completed in order to earn Honors credit: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) outside research activity that is determined through a written hypothesis and/or assigned by the instructors and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype; **AND** students attend Cadet Leadership Camp.

NOTE: This class satisfies one year of Honors credit OR one year of the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77335 SFJROTC 3: THE SCIENCE OF LEADERSHIP 3

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: SFJROTC 1 or 1H (This prerequisite may be waived at the discretion of the Senior Space Science Instructor)

Course Description: SFJROTC 3 includes three tracks of instruction: Space Science (SS); Leadership Education (LE) and Wellness. A summary of each follows:

Leadership Education 300 - Life Skills and Career Opportunities:
The purpose of this class is to assist students as they research career options; introduce them to the elements of a personal budget and financial plan; instruct them in the requirements for applying to a college or university, and teach students the essential process for pursuing a career.

Space Science 300 - Exploring Space: In this class students will learn the "big picture" of space exploration to include history of spaceflight, organizations doing work in space, and the overall space environment. Students will also understand the key concepts for getting from the surface of the Earth into Earth orbit, to other planets and back again.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTE: This class satisfies one year of elective credit OR the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77336 SFJROTC 3 HONORS: THE SCIENCE OF LEADERSHIP 3 HONORS

GRADE LEVEL: 11 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: SFJROTC 1 or 1H (This prerequisite may be waived at the discretion of the Senior Space Science Instructor)

Course Description: SFJROTC 3H includes three tracks of instruction: Space Science (SS) Honors; Leadership Education (LE) Honors and Wellness. A summary of each follows:

Leadership Education 300 Honors - Life Skills and Career Opportunities Honors:
The purpose of this class is to assist students as they research career options; introduce them to the elements of a personal budget and financial plan; instruct them in the

requirements for applying to a college or university, and teach students the essential process for pursuing a career.

Space Science 300 Honors - Exploring Space Honors:
In this class, students will learn the "big picture" of space exploration to include history of spaceflight, organizations doing work in space, and the overall space environment. Students will also understand the key concepts for getting from the surface of the Earth into Earth orbit, to other planets and back again.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

Required Component(s) to be completed in order to earn Honors credit: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) outside research activity that is determined through a written hypothesis and/or assigned by the instructors and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype; AND students attend Cadet Leadership Camp.

NOTE: This class satisfies one year of Honors credit OR one year of the Physical Education credit graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77345 SFJROTC 4: THE SCIENCE OF LEADERSHIP 4

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: SFJROTC 1 or 1H (This prerequisite may be waived at the discretion of the Senior Space Science Instructor)

Course Description: SFJROTC 4 includes three tracks of instruction: Space Science (SS); Leadership Education (LE) and Wellness. A summary of each follows:

Leadership Education 400 – Fundamentals of Management: This senior-level course provides students instruction in advanced concepts of Leadership and Management. Students will learn the techniques and skills involved in making management decisions; comprehend the concepts and skills of problem solving, decision-making, and negotiating. Cadets will analyze management and its application to JROTC

Space Science 400 – Global Awareness: This senior-level course introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Students will also study current Space Force issues.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTES: This class satisfies a 3rd year Mathematics graduation requirement OR one year of the High School Physical Education graduation requirement OR one year of elective credit.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77346 SFJROTC 4 HONORS THE SCIENCE OF LEADERSHIP 4 HONORS

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: SFJROTC 1 OR 1h (This prerequisite may be waived at the discretion of the Senior Space Instructor)

Course Description: SFJROTC 4H includes three tracks of instruction: Space Science (SS) Honors; Leadership Education (LE) Honors and Wellness. A summary of each follows:

Leadership Education 400 Honors – Fundamentals of Management Honors:
This senior-level course provides students instruction in advanced concepts of Leadership and Management. Students will learn the techniques and skills involved in making management decisions; comprehend the concepts and skills of problem solving, decision-making, and negotiating. Cadets will analyze management and its application to JROTC.

Space Science 400 Honors – Global Awareness: This senior-level course introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Students will also study current Space Force issues.

Wellness: Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

Required Component(s) to be completed in order to earn Honors credit: A student-led, independent STEAM (Science, Technology, Engineering, Arts or Mathematics) outside research activity that is determined through a written hypothesis and/or assigned by the instructors and is problem/research-based. The resulting product or products must be a publishable report and/or a competition ready experiment-based conclusion(s) and/or a competition ready product/prototype; AND students attend Cadet Leadership Camp.

NOTES: This class satisfies a 3rd year Mathematics graduation requirement OR one year of the High School Physical Education graduation requirement OR one year of elective credit.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77356 SFJROTC 6H: MANAGEMENT OF THE CADET CORPS HONORS

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Co-requisites: SFJROTC 1/1H, 2/2H, 3/3H or 4/4H

Course Description: This class is an extension of the regular Space Force Junior ROTC program. Students will be exposed to the principles of leadership and the fundamentals of management. The class will equip students with the qualities needed to serve in leadership positions within the corps. Throughout the course are many ethical dilemmas, case studies, and role-play activities which will allow students the opportunity to practice what they have learned.

Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTES: This class satisfies one year of elective credit towards graduation requirements.

77357 SFJROTC SPECIAL TEAMS

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Co-requisites: SFJROTC 1/1H, 2/2H, 3/3H, 4/4H

Course Description: This class is an extension of the regular Space Force Junior ROTC program. Students will be introduced to the principles of teamwork, building confidence and strengthening self-esteem participation in various SFJROTC teams, including Drill, Raider, Color Guard, Space Modeling, Marksmanship, Orienteering, Academic, Cyber Patriot and Awareness Presentation Teams. Students must be able to complete a regular physical fitness program; be able to stand for long periods of time; and participate in all team competitions and/or events as part of their academic grade.

Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTES: This class satisfies one year of elective credit towards graduation requirements OR one year of the High School Physical Education graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

77359 SFJROTC CADET SENIOR STAFF

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester

Prerequisite: Senior Space Science Instructor approval.

Co-requisites: AFJROTC 4/4H

Course Description: This is a class intended for AAE senior cadet leadership. Cadets will apply principles of leadership and fundamentals of management as they lead and manage the AAE SFJROTC cadet corps. Senior cadets in this class will serve in the top leadership positions within the corps. Throughout the year are many ethical dilemmas, case studies, and role-play activities which will allow cadets the opportunity to practice what they have learned.

Students will also participate in the Presidential Physical Fitness Program. The goals of this 36-week wellness and fitness program include:

- Creating individualized training programs based on national standards by age and gender
- Identifying areas of improvement for each student
- Incorporating a physical training program for each student to reach their goal
- Develop a personal nutritional plan for each student, promoting healthy eating habits

NOTE: This class satisfies one year of elective credit towards graduation requirement.

The wear of the official U.S. Space Force uniform once each week is required (all uniform items are provided free of charge).

TECHNOLOGY

79520 CTE COMPUTER SCIENCE *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: None

Course Description: The Computer Science Principles course is the first course in Software Systems Development. The course aims to broaden participation in computer science and computing by introducing students to the main concepts of computer science, having them engage in computational thinking practices and learning how computing influences the world. The main goal of the CS Principles course is to provide students a foundation in computer science concepts and practices so that students learn to reason using computational thinking and critical thinking skills. This course will engage students in the problem-solving and creative aspects of the field by creating products that involve the computational process the same way real-world professionals do. By applying the content and skills emphasized in the course, namely, problem-solving, abstraction, the use of and analysis of data, algorithmic thinking, creativity, programming, the effects of the Internet, and global impacts of computing, students will engage in rigorous instruction in order to become active and informed citizens in a global and technologically-driven society.

79525 CTE ROBOTICS *UC APPROVED

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Integrated Math I or concurrently enrolled with teacher recommendation.

Course Description: This course is designed to provide students with basic knowledge and skills necessary to understand, design, construct, program and operate a basic robot. Students will learn team building, problem solving, basic computer programming and design techniques. In addition, they will learn how to create and maneuver robots through the use of various technology. Use of technology related robotics such as light sensors, touch sensors, infrared sensors, robotics mechanisms, motors, and gears will also be incorporated into the course.

79467 AP COMPUTER SCIENCE A *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Integrated Math I or concurrently enrolled with teacher recommendation.
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

79467 AP COMPUTER SCIENCE PRINCIPLES *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Integrated Math I or concurrently enrolled with teacher recommendation.
AP students are expected to complete the end of year AP exam (cost associated – aide available)

Course Description: AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

79530 CTE VIDEO GAME DESIGN *UC APPROVED

GRADE LEVEL: 10, 11, 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Introduction to Computer Science or Computer Science or AP Computer Science A or AP Computer Science Principles.

Course Description: Game Design is a comprehensive introduction to the process of creating, designing, programming, and marketing a video game. Students will acquire the knowledge through hands on learning of game design, game theory, trends in game design, & the societal impacts of gaming. The course is rich in hands-on lab activities that allow students to develop & acquire organizational skills, collaboration, programming concepts, software & graphics applications. Discussions, writing and problem-solving further students' acquisition of the conceptual knowledge and skills needed to produce intelligently designed computer games that educate, as well as entertain.

ELECTIVE/CAREER SKILLS

79825 TEACHER'S AIDE

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Counseling office approval

Course Description: Seniors may request this position through their course request. Students will be assigned a position based on need. Under certain circumstances, Juniors may be placed in a Teacher's Aide position. Students, who accept a Teacher's Aide position, are making a year-long commitment.

79830 OFFICE AIDE

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Counseling office approval

Course Description: Seniors may request this position through their course request. Students will be assigned a position based on need. Students, who accept an Office Assistant position, are making a year-long commitment.

79810 EDUCATION INTERN

GRADE LEVEL: 12 COURSE LENGTH: Year CREDITS: 5 per semester
Prerequisites: Counseling office approval. Cumulative GPA of 3.0 or higher and competency in math and English.

Course Description: This course is designed to prepare students who are interested in pursuing a career working with children either in the field of education or health. Students will be trained to instruct both Math and English skills effectively, think critically to problem solve, and learn best practices to work with a group of elementary (K-5) students. Once trained, students will be placed accordingly under the supervision and direction of a classroom teacher.

HOMEROOM

GRADE LEVEL: 9, 10, 11, 12 COURSE LENGTH: Year CREDITS: n/a
Prerequisites: None

Course Description: This course is designed to promote teacher/student interaction regarding grades, progress toward graduation, post high school plans etc. This time may also be used for remediation and/or enrichment purposes at the discretion of the school instructional staff.