



# ADMIRAL FARRAGUT ACADEMY

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## **Upper School (grades 8-12) Curriculum Guide and Course Catalog 2017-2018**

Revised August 2017

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# Academic Outline

## Graduation Requirements

In addition to the Naval Science requirements, a minimum of 24 academic credits are required for graduation. Admiral Farragut cadets also must complete 80 hours of community service and earn the waterfront designation of Qualified Boat Handler (QBH) to fulfill graduation obligations.

### **Requirements for Graduation from Admiral Farragut Academy**

**English:** 4 credits

**Mathematics:** 1 credit per year - (Algebra 1 or above)

**Science:** 4 credits with 2 with labs.

**Social Studies:** 3 credits (World History - 1 credit; U.S. History - 1 credit; Economics - .5 credit / Government - .5 credit)

**Foreign Language:** 2 credits (two consecutive years of the same language)

**Naval Science:** 1 credit

**Physical Education / Health:** .5 (1 year of JROTC training will satisfy credit for PE/Health and 2 years will also satisfy one credit for Performing Arts. [Fl Dept of Ed 2015 statute](#))

**Performing / Fine Arts:** 1 credit

**Academic Electives:** 4 credits

Total: **24 credits**

## AFA Grade Point Averages

AFA considers a 93-100% a 4.0; 90-92% is a 3.75; 87-89% is a 3.5; 83-86% is a 3.0; 80-82% is a 2.75; 77-79% is a 2.5; 73-76% is a 2.0; 70-72% is a 1.75; 65-69% is a 1.5, 60-64% is a 1.0. On transcripts sent to colleges, AFA reports grades using letters, not numbers.

AFA transcripts weight classes in terms of difficulty. The vast majority of colleges weigh Honors classes .5 on a 4.0 scale and AP classes 1 full point (see explanation below). Therefore, it is always advantageous to take Honors and AP classes.

## Honors, AP (Advanced Placement), and Dual Enrollment Classes

Admiral Farragut Academy offers three types of advanced classes, designated Honors (H), Advanced Placement (AP), and Dual Enrollment (DE). These courses are for students with strong aptitudes in the given subject areas. As a result, students can expect more reading, more interactive discussion, and more in-depth analysis and critical thinking regarding subject material and related texts. Most advanced level courses at Admiral Farragut Academy are Honors courses or higher. The first advantage for students who take these types of courses is that those courses are weighted differently than regular classes. For example, if a student was to earn a 3.0 (B) in an Honors class, that grade would be “weighted” an additional .5 point, bringing their GPA for that class up to a 3.5. If it were an AP course, it would be “weighted” a full point, bringing that grade up to a 4.0 (A). **Dual Enrollment courses have the same designation as Advanced Placement attached to them, and therefore are also “weighted” an additional 1.0 point.** Another major benefit in taking these advanced classes is that selective colleges and universities place a high premium on higher-level courses when offered.

Please Note: **No Cadet will be permitted to take classes off campus.** Only Dual Enrollment courses completed on the AFA campus and taught by AFA instructors will be honored and displayed on the official Admiral Farragut Academy transcript. Academic credit awarded by another institution (high school, virtual school, online or college coursework) may fulfill graduation requirements, but will not be averaged into the student's overall GPA at Farragut. All academic honors coursework must be completed on the AFA campus. In addition, to be considered for high academic honors, a student must attend Admiral Farragut Academy for three years.

### **Academic Integrity Policy**

We believe that honesty in academic work is necessary for the effective development of the student and the valid evaluation of that student's performance. Honesty is a moral demand and a reflection of character. Admiral Farragut Academy will not tolerate academic dishonesty.

Academic dishonesty includes, but is not limited to the following acts:

Plagiarism, the use of language, ideas, or thoughts of another as if it were one's own original work;

Copying another student's answer in class examinations, take home examinations, laboratory work, class assignments, or homework;

Discussing answers during in-class examinations;

The use of crib notes, cheat sheets, or other types of unauthorized material, including electronic devices such as cell phones or smart phones;

Attempting to secure a future examination or information regarding the contents of a future examination;

Possession of a teacher's answer key;

Resubmission of old work, even the student's own, for a new course without permission from the new instructor;

submission of the same paper in two courses without specific authorization from both faculty members concerned;

Impeding the academic progress of other students, including, for example, unauthorized removal or misplacement of library materials, theft, or damage to equipment, and stealing, or defacing another student's work;

Disruptive behavior inhibiting the rights of others to education.

**All students, parents, guardians, and faculty should read this policy with care. Violations of either the spirit or letter of these statements result in a grade of zero for the infraction and may be a Class "A" offense. A conference with the student, parent, Commandant, and the Division Head addresses the severity of the infraction. A violation of this policy leaves the student subject to dismissal.**

### **Honor Concept**

Admiral Farragut Academy has a deep and abiding commitment to the moral development of its cadets. We instill the core values of Integrity, Self-Discipline, Perseverance, Wellness & Fitness and integrate the moral, ethical, and character development of cadets across every aspect of the Farragut experience.

Admiral Farragut Academy students should familiarize themselves with the Honor Concept from the U.S. Naval Academy. It states the following:

*"Midshipmen are persons of integrity: They stand for that which is right.*

*They tell the truth and ensure that the full truth is known. They do not lie. They embrace fairness in all actions. They ensure that work submitted as their own is their own, and that assistance received from any source is authorized and properly documented. They do not cheat. They respect the property of others and ensure that others are able to benefit from the use of their own property. They do not steal."*

Honesty requires that a student never lie, speak half-truths, or give evasive answers. Such behavior runs contrary to the basic goals of Admiral Farragut Academy.

Cadets are expected to display due deference, respect and courtesy to others at all times.

### **Advanced Placement (AP) Examination Policy**

AFA requires all students in AP courses to take the first semester exam and the actual AP exam in the spring. Students that miss the AP exam without an approved excuse will not receive AP credit.

### **Course Availability**

Interesting and challenging courses are available, however, elective courses are dependent upon student enrollment. The Administration reserves the right to cancel a course due to insufficient student response.

### **Drop/Add Policy**

Students are encouraged to take the selection of courses seriously. Consideration of requests to change a selected elective expires after the first week of class each semester. Following that date, there is an expectation that students remain in the courses selected.

## **Academic Honors**

### **Radford Star**

The Radford Star Award was established in 1960 and is named for the late Brigadier General Cyrus S. Radford, USMC, the first superintendent of the Academy. The qualifications for the Radford Star include a demonstration of excellence in the following areas: academics, deportment, Naval Science, and extracurricular activities.

### **Headmaster's List**

To qualify for the Headmaster's List, a student must have satisfactory deportment and earn all A's (90%) or better, or one B (80-89%) with all other grades of A. A student must be taking a minimum of six (6) academic courses.

### **Headmaster's Honor Roll**

To qualify for the Headmaster's Honor Roll, a student must have satisfactory deportment and earn B's (80%) or better in all courses. A student must be taking a minimum of six (6) academic courses.

### **National Honor Society, National Junior Honor Society**

The David Glasgow Farragut Chapter of the National Honor Society and National Junior Honor Society has as its members, eligible students selected based upon academics, service and character.

# College Placement

## Outline by Year

### **8th Grade Year**

The eighth grade year is largely a transition year, allowing the student to become acclimated to the high school environment and be an active member of the community (i.e., sports, clubs, etc.) while taking up to two high school credit classes. Students who wish to earn top leadership positions should take their first step in eighth grade, which is to earn their Qualified Boat Handler (QBH) Certificate.

### **Freshman Year**

The ninth grade year is largely one of making sure the student takes on the responsibility of maintaining the highest grade point average possible. A large number of their prerequisites for graduation will be taken this year to free up space in subsequent years for elective course offerings. For those entering AFA in the 9th grade, it is encouraged to get their Qualified Boat Handler (QBH) to be eligible for leadership opportunities.

### **Sophomore Year**

Tenth grade students take the PSAT in October. The results are usually a fair predictor of each student's future success on the SAT, taken in their junior and senior years. If a student's scores are high (over a 190), the student should consider advanced preparation for the PSAT/NMSQT (Preliminary SAT/National Merit Scholarship Qualifying Test), taken during their junior year. A score of 213 or higher will likely earn a student a National Merit Scholarship, which can be the key not only to paying for college, but also to gaining entrance into the nation's more prestigious universities. If a student's scores are low, it is possible for the student to improve by enrolling into one of several SAT prep classes. Some of the more common prep courses include the Princeton Review, an online prep class such as the NJROTC College Test Preparation Program (<http://jrotccollegeprep.com/>), or the opportunity to enroll online in Method Test Prep.

Admiral Farragut Academy recommends that the family begin to review their requirements for college (i.e. location, cost, size of school, etc.) and spend the summer of the student's sophomore year visiting and contacting prospective schools. This will likely have the effect of increasing the student's desire to achieve.

### **Junior Year**

Out of all the years at the high school level, the junior year may be most crucial. The students have worked themselves into upper level classes and they should be deeply involved in community service, leadership, athletics, and extracurricular activities. By the junior year, students should have learned to balance their time effectively in these areas, as it is crucial for success at the collegiate level. During the spring semester, interested juniors meet with the college placement director to discuss the student's plan for college. Over the "senior summer", Farragut strongly urges all students to take an SAT or ACT preparation course, and to finish their community service requirements.

The third year student takes another PSAT in October and then takes the ACT and the SAT twice before the end of the year. During the summer of their junior year, the family and student should narrow the field of prospective colleges down to a manageable few. Make calls to these schools (admissions) and schedule campus tours. Certain colleges have interview requirements, and typically, interviews are a good idea whether required or not.

## Senior Year

Each senior has the opportunity to meet with the placement officer and begin the process of filling out applications. Ideally, all applications are complete and sent by November 30 of the senior year. There are two reasons for this. First, due to the competitive nature of most colleges and universities, it gives the AFA student an inside track compared to those who procrastinate. Second, it offers the AFA student an opportunity to review their selections, search for scholarships and explore other schools. All ROTC and academy applications enjoy the aid of the Naval Science Department for completion. The College Placement Office assists as needed. For students who seek Early Decision (ED), applications, letters of recommendation need submission by the third week of October unless the ED date is earlier.

Required forms that should be included in the application are transcripts, letters of recommendation (from department heads, teachers, coaches, community service leaders, etc.), the application, and an essay or personal statement, depending on the requirement for the college. Parents should be prepared to submit any required financial information should the student request financial aid. Additionally, the parents or guardians must complete and submit FAFSA (Free Application For Federal Student Aid) and the CSS/ Financial Aid PROFILE. Seniors have several opportunities to take the SAT or ACT tests during the year, but logic dictates that the earlier they achieve an acceptable score, the better it will be.

In addition, Florida residents should complete the Bright Futures Scholarship application early in the academic year. Please note that Bright Futures requires 100 hours of community service. See our counselor for more information.

## Overview of the College Placement Office

Every year the College Placement Office helps identify colleges that best match each individual student's qualifications and desires for future vocations and/or graduate study. This evaluation helps determine for the student those colleges and universities that will accept their standardized test scores, the SAT (Scholastic Aptitude Test) or the ACT (*American College Test*) with their intended major as well as their preferred location, student body size and athletic and extracurricular opportunities. Many students base their decisions on the relative proximity of the college to their home. Others make their decisions based on the degrees offered, while others consider more practical matters, like cost and availability of scholarships, particularly an ROTC (Reserve Officer Training Corp) award, which many times covers full tuition, fees, and, in many cases, room and board. Still others remain in Florida because of a prepaid program or because they qualify for the Bright Futures merit-based scholarship, which covers between 75-100% of tuition at any public university in the state of Florida. A select number earn appointments to the nation's service Academies, all of which offer full scholarships with mandatory military commitment upon graduation.

Please note that a student's involvement with athletics, clubs, NJROTC (Naval Junior Reserve Officer Training Corps), and additional extracurricular activities is crucial. The Office of College Placement recommends that all students maintain at least a 3.0 GPA (Grade Point Average) in their core classes (English, Social Studies, Foreign Language, Mathematics, and Science) if they wish to be accepted into a quality four year college or university. Cadets should strive to take as many Honors level, AP, and Dual Enrollment courses as allowed, while supplementing their education with a broad base of electives. **It is advisable that students have three years of foreign language preparation, even though AFA graduation requirements require only two years.**

# Academic Services

## Standardized Testing

Admiral Farragut Academy provides standardized testing to evaluate the level of academic functioning for each student and to expose students to standardized testing formats.

The “norm-referenced” achievement test we administer at Admiral Farragut Academy is the *Terra Nova, 3rd Edition*. The Terra Nova measures achievement in the basic skills taught in schools throughout the nation. Test administration for the Terra Nova is in the spring and is administered to students in grades 2 - 7. Our 8th - 11th grade students also take the PSAT in the fall. The PSAT, administered through the College Board, measures critical reading skills, math problem-solving skills, and writing skills. Both spring and fall exams are nationally normed tests.

Nationally normed and standardized tests administered annually at Admiral Farragut Academy include:

- PSAT - Pre SAT (grades 8-11)
- SAT - AFA is a testing site (grades 10-12)
- ACT - AFA is a testing site (grades 10-12)

## The Center for Academic Success (CAS)

The Admiral Farragut Academy CAS provides a rich learning environment for all students. The center encourages students to use their unique learning strengths and styles to become successful and confident lifelong learners. Our dedicated staff of teachers and learning specialists works with students to develop and fine tune skills for success in the classroom. Our diverse services offer students with varied strengths and weakness the opportunity to approach learning in the most meaningful and beneficial ways.

All students attending AFA are encouraged to use the services offered at the CAS. A parent or teacher generally refers students as a need becomes evident. Standardized test scores or psycho-educational assessments may identify the student's needs. Students may also request assistance as necessary.

## College Board Testing Accommodation

Students identified with a special testing need may receive accommodations on the PSAT, SAT and AP exams offered through College Board. The **Center for Academic Success (CAS)** staff assists with applications for the SSD (Services for Students with Disabilities) approval. The CAS staff will also assist with filing necessary paperwork to obtain approval for accommodations for ACT testing.

# Services of the Center for Academic Success

## Remediation and Intervention

The center implements various strategies for students needing remediation or intervention in reading, math, or study skills. Our staff tailors programs to the specific needs of each student. **There may be an additional fee for these services, depending on the level of remediation required.**



### **Specialized Reading Programs**

The Lindamood-Bell@([www.lindamoodbell.com](http://www.lindamoodbell.com)) reading and spelling programs in conjunction with other proven programs are available to assist students troubled by any component of the reading process, from basic phonemic awareness to comprehension, synthesis, and analysis.

### **Homework/Class Work Assistance**

Students struggling in a class or classes, may request assistance from the Center of Academic Success staff. Depending upon the level of assistance needed, students may receive help during the academic day, as appropriate, or after school from our tutoring staff for an additional fee.

### **SAT Preparation**

Short-term courses focus on the material in the new SAT and assist students as they prepare for the test.

### **Peer Tutoring**

Students often just need assistance with note taking, lecture review, or a study buddy. The peer-tutoring program offers students the opportunity to buddy-up with someone from the same class or someone who has excelled in the subject area to assist the student as they master subject content.

### **Academic Subject Tutoring**

Students in need of tutoring in a specific academic subject area work together with a tutor who has expertise in the subject area. The tutoring occurs after the academic day is completed. There is an additional fee for this service.

# English-Language Arts

## Upper School English Course Selections

Language Arts III-8th grade English I English I Honors English II English II Honors English III English III Honors	AP English III: English Language and Composition English IV English IV Honors AP English IV: Literature and Composition Journalism/Yearbook Creative Writing-Literature of Sports Heroes
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## Upper School English Course Descriptions

### **Language Arts III (8th)** - a full year course

The course is designed to develop mastery in multiple areas. Students will practice composition and editing while using creative writing skills as well as expository writing. Speaking and listening skills will be employed through group work and research presentations. Students will be expected to improve their spelling skills through vocabulary acquisition and reading practice, as well as the weekly spelling words. Literary analysis will be employed through novels, plays, and poetry. Daily writing and reading assist students in an appreciation of their own creativity and improvement of skills within the humanities.

### **English I** - a full year course: credits – 1.00

The curriculum consists of the following units of study: literature, writing, public speaking/presenting, and grammar/usage. Students will be studying a variety of literature forms, ranging from the Renaissance Period to Contemporary Literature. Students will analyze stories, apply the elements of literature, identify figures of speech, and develop critical thinking skills. The language arts curriculum will provide students with an opportunity to develop the skills for clear and effective writing. Reviewing and applying proofreading skills, capitalization, punctuation, spelling, grammar and usage will be included, as well as the usage of web tools to further build 21st century literacy skills.

*Prerequisite: Successful completion of English 8*

### **English I Honors** - a full year course: credits – 1.00

Students approved for this course complete all of the requirements of English I. Reading selections for the honors course may differ from English I. They are generally longer, more complex pieces, which can be more challenging than English I works. Furthermore, honors students read more literary pieces with a higher level of independence. Expectations for students entering English I Honors are strong reading comprehension skills, adept critical thinking skills and solid writing abilities. Students in Honors are held to a higher standard in testing and writing assessments.

*Prerequisite: Successful completion of English 8, Approval of Instructor, Department Chair, and Division Head*

### **English II** - a full year course: credits – 1.00

English II is designed to build upon and expand students understanding of the literary genres using reading selections in fiction, nonfiction drama and poetry. The readings will include authors and selections from many cultures and time periods. The course is designed to build skills in the use of the language of literary analysis and discussion, and to develop the skills for clear and effective writing. Vocabulary, composition and critical reading and thinking are incorporated in all that we do throughout the year. The difficulty level of the reading selections and the performance expectations in testing and composition are set at a high standard in order to prepare students for SAT's as well as to prepare them for higher level classes in their junior and senior years. Each week students will have writing assignments, vocabulary assignments and reading assignments for homework. There are usually weekly quizzes on the reading assignment and the vocabulary unit.  
*Prerequisite: Successful completion of English I or English I Honors*

**English II Honors: World Literature** - a full year course: credits – 1.00

English II Honors is a broad based survey course designed to provide an overview of some of the significant pieces of literature from the non-English speaking world. The course surveys literature from the ancient to modern period. The course is designed to build skills in the use of the language of literary analysis and discussion, and to develop the skills for clear and effective writing. Vocabulary, composition and critical reading and thinking are incorporated in all that we do throughout the year. The difficulty level of the reading selections and the performance expectations in testing and composition are set at a high standard in order to prepare honors students for the rigors of AP classes in their junior and senior years at AFA.  
*Prerequisite: Successful completion of English I, approval of the Instructor, Department Chair, and the Division Head*

**English III: American Literature** - a full year course: credits – 1.00

English III is a study of the major literary topics and themes across the history of the United States from pre-colonial times to present day. Throughout the school year, we will focus on the major literary forms of the emerging nation, analyze literary themes and trends, and research and compose several papers, speeches, and presentations using representative forms of discourse. We will cover different types of literature from novels and plays, to short stories and poetry. Aside from learning the structure of literature and academic writing, we will study how each text reflects the ideologies and events occurring in America during each text's selected time period. Throughout the school year, you should keep in mind the effect of these works of literature on America and how these pieces of writing can continue to inspire readers today.  
*Prerequisite: Successful completion of English II or English II Honors*

**English III Honors: American Literature** - a full year course: credits – 1.00

English III Honors is a study of the major literary topics and themes across the history of the United States from pre-colonial times to present day. Throughout the school year, we will focus on the major literary forms of the emerging nation, analyze literary themes and trends, and research and compose several papers, speeches, and presentations using representative

forms of discourse. We will cover different types of literature from novels and plays, to short stories and poetry. Aside from learning the structure of literature and academic writing, we will study how each text reflects the ideologies and events occurring in America during each text's selected time period. Throughout the school year, you should keep in mind the effect of these works of literature on America and how these pieces of writing can continue to inspire readers today.

*Prerequisite: Successful completion of English II or English II Honors, approval of the Instructor, Department Chair, and the Division Head*

### **Advanced Placement English III: English Language and Composition** - a full year course: credits – 1.00

AP English Language and Composition is a yearlong, college level course designed to engage students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Through writing, reading, speaking, viewing, and listening, we will study the interactions among the **author's purpose**, the **audience's expectations**, the **subjects** being discussed, and the **context** in which these interactions take place, as well as the **conventions** and **resources** of language that contribute to a message's **effectiveness**.

The backbone of the course will be reading texts of various lengths, with the course organized by genres, including autobiography and diary, biography and history, criticism, essays, fiction, journals, political writing, and science and nature. Absorbing these model examples, students will analyze and interpret, and write conscious of content, purpose, organization and audience, attempting their own richness and complexity in argument or position papers. Papers will go through numerous stages and drafts, including revision. It is expected that students will know and use standard English grammar in these imitation exercises, journals, collaborative writing, and in-class responses. Attention will be paid to style, including a wide range of vocabulary, a variety of sentence structures, logical organization, a balance of generalization and specific detail, and an effective use of rhetoric, including tone, voice and diction and sentence structure.

*Prerequisite: Successful completion of English II or English II Honors, approval of the Instructor and the Division Head.*

### **English IV and English IV Honors** - a full year course: credits – 1.00

English IV and English IV honors focus on a study of British literature. Students will learn how to appreciate differences with regard to syntax and diction in comparison to American literature. Students must analyze literature at a higher level, considering literary devices, historical context, and deeper contextual meaning. They must have independence in reading, annotating, research skills, literary analysis, and writing. In addition to expanding these skills, students will work to expand their vocabulary and emphasize the ability to think critically and reflectively in writing. Students will also work to articulate themselves verbally and in a variety of different writing styles.

*Prerequisite for English IV: Successful completion of English III or English III Honors*

*Prerequisite for English IV Honors: Successful completion of English III or English III Honors.*

### **Advanced Placement English IV: Literature and Composition** - a full year course: credits – 1.00

AP Literature and Composition is designed to provide a college level experience in the close reading, analysis of, and critical writing about literature. This course complies with the requirements in the *AP English Course Description*. We will discuss broad ideas in literature such as structure and style (diction, syntax, figurative language), and develop ways of writing in detail about setting, plot, theme, character, point of view, imagery, tone, allusion, satire, and poetic forms. Students will analyze and write about literature that covers many different periods and genres. We will also seek to

understand universal and widely used themes and truths within literature. It will be each student's goal to realize new things about the human condition using literature as his/her guide with a focus on the author's purpose. Students in the course must complete the standardized AP Literature and Composition Exam. Grades of 3 or higher on the AP exam will be accepted for college credit at most colleges and universities in the United States. It is highly recommended that students take AP Language and Composition in the 11th grade as preparation for AP Literature and Composition.

*Prerequisite: Successful completion AP English III or English Honors III, approval of the Instructor, and the Division Head.*

**Journalism/Yearbook** – a full year course: credits – 1.00

Journalism/ Yearbook is an advanced course open to students interested in developing the skills necessary to produce *The Buccaneer*, Admiral Farragut Academy's annual. Students select a theme and cover design at the start of the school year and progress through the deadline schedule to the book's completion. There is a stress on skill development in computer journalism including layout, research, photography, cropping, copy writing, editing, and effective proofreading. The use of photography to tell a story is critical. Administrative details of organization, advertising sales and planning are integral to success. Successful completion of assigned pages is the basis for evaluation. In addition, the class may produce a literary magazine.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**Creative Writing: Literature of Sports Heroes** - a full year course: credits - 1.00

Creative Writing (with an emphasis on literature specific to heroism in sports) is a year-long course dedicated to creative writing that will focus on the concept of heroism throughout literary history, and how heroism in literature has focused on sports in contemporary times. The class will define exactly what a "hero" is, and what distinguishable traits a hero must possess in order to be considered heroic. Initially, the course will focus on classic heroic figures in literature, the environments that shaped their heroism, and how they are revered by society through literature. Examples of this include Achilles and Prometheus from Greek Mythology, and Beowulf from Anglo-Saxon English poetry. The course will then focus on sports heroism through Literature, discuss and determine why sports have become such an integral part of literature and culture, and how sports function in our society on a day to day basis. Contemporary works include "Seabiscuit" by Laura Hillenbrand, which focuses on sports as a beacon of hope during a time of economic decline and ruin, and "The Natural" by Bernard Malamud, which focuses on a legendary baseball players pitfalls at a time when Baseball was truly considered to be "America's Pastime." Creative writing assignments will vary, but will include sports journalism (journalistic articles) based on current events and historical works of literature, essays (on a variety of topics), and written responses to film study.

## **ESOL—English for Speakers of Other Languages**

The ESOL program at Admiral Farragut Academy provides students who speak English as a second language the opportunity to develop their English skills and participate in AFA's college preparatory curriculum in grades 8-12. The objective of the ESOL program is to improve the English language skills of the student and ultimately to move the student into the mainstream English level class. Students will take a language proficiency test to determine placement in an ESOL course.

### **Upper School ESOL Course Selections**

ESOL I ESOL II ESOL III ESOL IV	
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## Upper School ESOL Course Descriptions

**ESOL I** - a full year course: credits - 1.00

The course begins to develop students' ability to comprehend spoken English at a slow rate of speech and to express themselves in simple situations. Emphasis is on listening for content, intonation, and rhythm patterns, imitating native speakers of English, and learning expressions necessary for basic social encounters. The students will also practice reading in English, through short stories, poetry, and novels.

**ESOL II** - a full year course: credits - 1.00

This course is offered to students with an appropriate score on the standardized placement test for ESOL II. The course continues to develop students' ability to comprehend spoken English at a quicker rate of speech and to express themselves in more complex situations. Emphasis is on listening for content, intonation, and rhythm patterns, imitating native speakers of English, and learning expressions necessary for basic social encounters. Students will also practice reading in English.

**ESOL III** - a full year course: credits - 1.00

This component of English as a Second Language is designed to increase and refine skills in reading speed, comprehension and retention; in writing organization, fluency, clarity and style; and in understanding and applying advanced grammatical concepts to enhance both comprehension and expression in English. Group interaction, critical thinking skills and appreciation of cultural differences in learning approaches are incorporated in instructional techniques. Students will be introduced to research writing and documentation. The intent is to prepare the ESOL student for mainstreaming into the school English program, and uses some materials from English I and II.

**ESOL IV** - a full year course: credits - 1.00

As the last course in English as a Second Language, this component also is designed to increase and refine skills in reading speed, comprehension and retention; in writing organization, fluency, clarity and style; and in understanding and applying advanced grammatical concepts to enhance both comprehension and expression in English. Group interaction, critical thinking skills and appreciation of cultural differences in learning approaches are utilized, and students will be instructed in the preparation of a research paper. The intent is to prepare the ESOL student for mainstreaming into the school English program, and uses some materials from English III and IV courses.

## Mathematics

The Department of Mathematics at Admiral Farragut Academy maintains that every student *can* and *will* learn mathematics. The discipline of mathematics affords students the opportunity to develop analytical thought, logical reasoning, and problem solving skills that will serve them well in every field of study and every walk of life. Since mathematics opens the door to an enormous number of opportunities, it has been hailed as one of the most versatile components of the entire educational process. Regardless of a student's goals or interests, mastery of mathematics guarantees success in a diverse array of professions.

## HONORS

Since the Department of Mathematics is committed to offering the highest quality education possible, students are grouped in classes according to mathematics level and ability. Homogeneous grouping is essential to provide superior classroom instruction and to serve the students' needs throughout the mathematics curriculum. HONORS sections are reserved for those students who are both strong in the mastery of the background material required for a course and also diligent and conscientious in the daily execution of assignments. In short, an HONORS student in mathematics must be as hard-working as he/she is intelligent. Final decisions on mathematics placement are made by the Department Chair, in collaboration with the Head of the Upper Division. \*\*HONORS sections include the same material as the non-honors sections of the same course, using the same textbook, with the following three distinctions:

1. A deeper understanding of the material with emphasis on independent thinking and mastery of challenging content is required. This is reflected in advanced problems on assignments and then eventually on tests and quizzes as well.
2. A faster pace allows coverage of additional material. The extra sections covered will vary and are listed each semester.
3. Projects, presentations, or reports may be added to the assessment process periodically.

## Upper School Mathematics Course Selections

Algebra 1	Pre-Calculus
Geometry	Pre-Calculus Honors
Geometry Honors	AP Statistics
Algebra 2	Calculus Honors
Algebra 2 Honors	AP Calculus AB
Advanced Math Topics	AP Calculus BC
Accounting	Finance

## Upper School Mathematics Course Descriptions

**Algebra 1** - a full year course: credits – 1.00

The curriculum for this course introduces algebraic concepts and develops skills to equip the college preparatory student for Geometry and Algebra 2. Major topics include variables, expressions, real numbers, solving one-step and multi-step equations and inequalities, the coordinate plane, relations, functions, graphing linear equations and inequalities, and factoring. NOTE: The use of a basic scientific calculator is required.

*Prerequisite: Successful completion of Pre-Algebra, approval of the Instructor, Department Chair, and the Division Head.*

**Geometry** - a full year course: credits – 1.00

Geometry provides the opportunity to develop critical thinking skills and problem-solving strategies. This course also incorporates algebraic concepts learned in Algebra I. Major topics include discovering points, lines, planes, and angles, connecting reasoning and proof, perpendicular and parallel lines, congruent triangles, quadrilaterals, proportion and similarity, right triangle trigonometry, circles, polygons, and area. The use of a basic scientific calculator is required.

*Prerequisite: Successful completion of Algebra I or Algebra I Honors, approval of the Instructor, Department Chair, and the Division Head.*

**Geometry Honors** - a full year course: credits – 1.00

Geometry provides the opportunity to develop critical thinking skills and problem solving strategies. This course also incorporates algebraic concepts learned in Algebra I. Major topics include discovering points, lines, planes, and angles, connecting reasoning and proof, perpendicular and parallel lines, congruent triangles, quadrilaterals, proportion and similarity, right triangle trigonometry, circles, polygons and area. The use of a basic scientific calculator is required.

*Prerequisite: Successful completion of Algebra I or Algebra I Honors, approval of the Instructor, Department Chair, and the Division Head.*

**Algebra 2** - a full year course: credits – 1.00

This course serves to reinforce skills learned in Algebra I and provides for introductory background topics found in Pre-Calculus. Major topics include factoring, algebraic fractions, radicals and rational exponents, complex numbers, quadratic equations, rational equations, linear equations and inequalities, functions and functional notation, exponential and logarithmic properties, and systems of equations and inequalities. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Algebra I and Geometry, approval of the Instructor, Department Chair, and the Division Head.*

**Algebra 2 Honors** - a full year course: credits – 1.00

This course serves to reinforce skills learned in Algebra I and provides for introductory background topics found in Pre-Calculus. Major topics include factoring, algebraic fractions, radicals and rational exponents, complex numbers, quadratic equations, rational equations, linear equations and inequalities, functions and functional notation, exponential and logarithmic properties, and systems of equations and inequalities. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Algebra I and Geometry, approval of the Instructor, Department Chair, and the Division Head.*

**Advanced Math Topics** - a full year course: credits - 1.00

This course is designed to prepare students for college work that will not require extensive Calculus. Major topics to be covered include but are not limited to: comprehensive review of algebra and geometry skills; quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions; probability and statistics; finance and business topics. As appropriate, career options relevant to this level of math will be explored as well.

*Prerequisite: Successful completion of Algebra 1 and Geometry, approval of the Instructor, Department Chair, and the Division Head.*

**Pre-Calculus** - a one year course: credits – 1.00



This course is for students who perform very well in Algebra II or Algebra II Honors and wish to pursue higher-level math. Major topics include exponents and radicals, polynomials, functions and their graphs, polynomial and rational functions, systems of equations and inequalities, and exponential and logarithmic functions. This course also focuses on the study of trigonometry and the necessary functions needed to be successful in performing Calculus operations. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Algebra 2 or Algebra 2 Honors, Geometry or Geometry Honors, approval of the Instructor, Department Chair, and the Division Head.*

**Pre-Calculus Honors** - a full year semester course: credits – 1.00

This course is for students who perform very well in Algebra II or Algebra II Honors and wish to pursue higher-level math. Major topics include exponents and radicals, polynomials, functions and their graphs, polynomial and rational functions, systems of equations and inequalities, and exponential and logarithmic functions. This course also focuses on the study of trigonometry and the necessary functions needed to be successful in performing Calculus operations. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Algebra 2 or Algebra 2 Honors, Geometry or Geometry Honors, approval of the Instructor, Department Chair, and the Division Head*

**Calculus Honors** - a full year course: credits – 1.00

The course in calculus is for students who have demonstrated above average interest, ability, and achievement in Pre-Calculus mathematics. A geometric and heuristic approach to calculus: differentiation and integration of algebraic, exponential, and logarithmic functions, applications to graphing, marginal analysis, optimization, areas and volumes. Also included are topics from integral calculus, partial differentiation, and double integration. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Pre-Calculus, approval of the Instructor, Department Chair, and the Division Head*

**Advanced Placement Calculus AB** - a full year course: credits – 1.00

The course is for students who have demonstrated extraordinary interest, ability, and achievement in both Pre-Calculus and Trigonometry. Major topics include limits and continuity, the derivatives of algebraic, trigonometric, logarithmic, and exponential functions, implicit differentiation, applications of the derivative, differentials, indefinite and definite integrals and applications of exponential functions. Students sit for the AP Exam in the spring. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Pre-Calculus, approval of the Instructor, Department Chair, and the Division Head.*

**Advanced Placement Calculus BC** - a full year course: credits - 1.00

This course is for the very top students in terms of ability and work ethic. Topics include those of AP Calculus AB with the added content of series and sequences, focusing on convergence and divergence tests, power series, and Taylor and Maclaurin series. Students sit for the AP Exam in the spring. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Pre-Calculus, approval of the Instructor, Department Chair, and the Division Head.*

**Advanced Placement Statistics** - a full year course: credits - 1.00

Outstanding completion of Algebra 2 is required. This course includes descriptive statistics, measures of central tendency

and dispersion, probability, probability distributions, relative frequency distributions, sampling distributions, binomial distribution, normal distribution, the student's "t" distribution, the Chi-square distribution, estimation using confidence intervals, hypothesis testing, linear regression and correlation. Students sit for the AP exam in the spring. The use of a TI-83 or TI-84 Plus graphing calculator is required.

*Prerequisite: Successful completion of Algebra 2 Honors, Geometry 2 Honors, approval of the Instructor, Department Chair, and the Division Head.*

**Finance** - a full year course: credits - 1.00

This is an introductory finance course, students learn basic principles of economics and best practices for managing their own finances. Students learn core skills in creating budgets, developing long-term financial plans to meet their goals, and making responsible choices about income and expenses, along with stock market investing. They gain a deeper understanding of capitalism and other systems so they can better understand their role in the economy of society.

**Accounting** - a full year course: credits - 1.00

This is an introductory accounting course, which enables learners to apply their accounting knowledge and understanding in order to analyze and present information, give reasoned explanations, and make judgements and recommendations. The syllabus covers topics such as the recording of financial information, accounting principles and control systems, and the preparation of final accounts for a variety of different organizations and businesses.

Learners find out about raising capital by shares and loans, ratio analysis and cost accounting, and also study the preparation of cash flow statements, cash flow analysis, and standard costing and investment appraisal, among many other topics.

**NOTE: The use of a TI-83 or TI-84 Plus graphing calculator is required in Algebra 2, Pre-Calculus, AP Statistics, Statistics Honors, and all Calculus classes. A basic scientific calculator is required in all others.**

## Science

The Science Department integrates our studies with the ever-changing role of science in the world around us. The philosophy of the Science Department at Admiral Farragut Academy challenges each individual student to expand upon the knowledge taught in the classroom and apply it to the real world. The primary goal of the department is to provide each student with a well-rounded, problem-solving approach to a variety of science disciplines. We provide, in all students, an appreciation for the relevance of science to their future physical and economic well-being.

### Upper School Science Course Selections

8th Grade Earth Science	Biology
8th Grade Computer Science (Required)	Biology Honors
Physics	AP Biology
Physics Honors	Marine Science I
AP Physics	Anatomy and Physiology Honors
Chemistry	SCUBA
Chemistry Honors	Master Dive
AP Chemistry	Divemaster

## Upper School Science Course Descriptions

### **Science 8: Earth Science** - a full year course

The 8th grade science course is oriented towards Earth Science, emphasizing the interrelationships between the physical and biological dynamics of the planet. The program starts with a basic overview of the metric system, followed by Oceanography, Structure of the Earth, Plate Tectonics, and Fossil history. Frequent demonstrations and periodic media presentations emphasize the material.

*Prerequisite: Successful completion of Science 7*

### **8th Grade Computer Science** - a one semester course, mandatory for all 8th grade

Students become familiar with the basic principles of a personal computer, including the internal hardware, operating system, and software applications. Students gain practice in using key applications such as word processing, spreadsheet, and presentation software, as well as understand social and ethical issues around the Internet, information, and security. Students will also learn the touch method of keyboarding using a personal computer keyboard as well as document processing for personal letters and memos. Emphasis will be on speed and accuracy as well as spelling, grammar, and punctuation.

### **Marine Science I** - a full year course: credits – 1.00

Marine Science is a year-long course offered to Ninth and Tenth graders. The curriculum and lectures encompass a wide variety of aspects pertaining to the education and protection of our natural resources in and around the Tampa Bay Estuary. The textbook also integrates the marine science content with major physical science and life science curricula. In conjunction with local environmental programs, students participate in projects such as the Coastal Clean-up, Bay Grasses in Classes and NOAA's Oral History Program. Lectures and laboratory experiments include animal identification and dissections. This class offers students the opportunity for community service hours. *Prerequisite: Approval of Instructor, Department Chair, or Division Head.*

### **Biology** - a full year course: credits – 1.00

Biology is the “study of life.” This laboratory and project-based science emphasize the process of scientific investigation through the study of living organisms. Topics include parts and functions of the cell, genetics, plants, microorganisms, classification and the anatomy and physiology of a variety of organisms. Through lab activities, students learn how to use a microscope, prepare slides, study the different biomes, understand the intricacies of the Food Web, and explore the world of bacteria. Our purpose is to examine life and the role we play in it.

*Prerequisite: Required of all students. It is suggested that the course be taken in the Freshman or Sophomore year.*

### **Biology Honors** - a full year course: credits - 1.00

While the content focus of this course is consistent with the Biology I course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. Biology is the “study of life.” This laboratory and project-based science emphasize the process of scientific investigation through the study of living organisms. Topics include parts and functions of the cell, genetics, plants, microorganisms, classification and the anatomy and physiology of a variety of organisms. Through lab activities, students learn how to use a microscope, prepare slides, study the different biomes, understand the intricacies of the Food Web, and explore the world of bacteria. Our purpose is to examine life and the role we play in it.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head.*

**Advanced Placement Biology** - a full year course: credits - 1.00

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. The AP Biology course is designed to provide students with a learning experience equivalent to a two-semester college introductory biology course taken by biology majors during their first year of college. The course is designed to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. (Excerpted from AP Course Description, The College Board)

*Prerequisite: Successful completion of Biology, Approval of Instructor, Department Chair, and Division Head.*

**Chemistry I** - a full year course: credits – 1.00

Chemistry is the science of matter. The student's vocabulary and knowledge of chemical principles expands within the framework of laboratory experiments and problem solving techniques. Students review the scientific method, dimensional analysis, chemical nomenclature, periodicity and atomic structure, reactions, gas laws, solution and acid-base chemistry.

*Prerequisite: Successful completion of Physical Science and Algebra II or Algebra II Honors or Approval of Department Chair, and Division Head.*

**Chemistry I Honors** - a full year course: credits - 1.00

Honors Chemistry is an introductory chemistry course designed to prepare students for college level chemistry courses. In this course students will take an in depth look at the quantitative concepts associated with chemistry such as stoichiometry, gas laws, and thermochemistry, in addition to all topics covered in Chemistry I. Students will also begin to use critical thinking to explore the relevance of chemistry in everyday society.

*Prerequisite: Successful completion of Physical Science and Algebra II or Algebra II Honors or Approval of Department Chair, and Division Head.*

**Advanced Placement Chemistry** - a full year course: credits - 1.00

AP Chemistry is designed to be the equivalent of the first year college chemistry course General Chemistry. In this course students will examine fundamental chemical concepts and mathematical relationships in addition to gaining basic laboratory skills. Topics covered will include kinetics, thermodynamics, equilibrium, electrochemistry, and basic organic nomenclature and reactions. Students interested in AP Chemistry should already have a basic understanding of the fundamental chemistry topics including nomenclature, writing and balancing equation, stoichiometry, reactions types, dimensional analysis and atomic structure.

*Prerequisite: Successful completion of Chemistry I, Approval of Instructor, Department Chair, and Division Head*

**Physics** - a full year course: credits – 1.00

This course is an introduction to classical Physics, the study of natural laws. Topics include: Mechanics, temperature, thermal energy, wave properties of sound and light, mirrors, lenses, current electricity, magnetic fields, solid state electronics, and nuclear applications. Weekly laboratory work is essential.

*Prerequisite: Successful completion of Physical Science or Chemistry and Algebra I, or Approval of Department Chair, and Division Head*

**Physics Honors** - a full year course: credits – 1.00

This course is an honors level study in classical Physics, the study of natural laws. Topics include: Mechanics, temperature, thermal energy, wave properties of sound and light, mirrors, lenses, current electricity, magnetic fields, solid state

electronics, and nuclear applications. Weekly laboratory work is essential.

*Prerequisite: Successful completion of Precalculus and Physical Science or Chemistry, Score of 41 on College Placement Test (CPT) in College Algebra, or Approval of Department Chair, and Division Head*

**AP Physics C Mechanics** - a full year course: credits – 1.00

This course is a college level study in classical Physics with applied calculus. Topics include: kinematics, two and three dimensional motion, Newton's laws of motion, energy, momentum, gravitation, simple harmonic motion. Weekly laboratory work is essential.

*Prerequisite: Successful completion of Precalculus and Physical Science or Chemistry, Score of 41 on College Placement Test (CPT) in College Algebra, or Approval of Department Chair, and Division Head*

**Anatomy and Physiology Honors** - a full year course: credits – 1.00

Anatomy and Physiology Honors covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. It introduces common human disease processes. Coursework includes lectures, laboratory activities, notebook checks, and case studies/literature reviews.

*Prerequisite: Successful completion of Biology I, Biology I Honors, or AP Biology; Approval of Instructor, Department Chair, or Division Head*

**SCUBA** - a full year course: credits - 1.00

Students will have the opportunity to earn the following certifications: Open Water Diver, First Aid/CPR, and Advanced Diver. The courses will be taught during the academic day as a year long science elective. Throughout the year, students will learn to be safer, more knowledgeable, and have better technique as opposed to other dive programs due to the additional time spent on the courses and higher standards. Students will learn well beyond the basic diving physics, physiology, and decompression theory that are typically obtained. The class will begin with the most basic scuba course (no experience necessary), Open Water Diver. Once the basic skills are mastered, we will move into the Advanced course for an introduction to underwater ecology, navigation, search and recovery, advanced propulsion, low visibility, and deep diving.

**Master Diver** - a full year course - credits - 1.00

The Master Diver is the highest non-leadership certification in diving. The course helps students develop instructor-level knowledge and skills in diving physics, physiology, decompression theory, advanced equipment configurations, and in-water skills. For those who do aspire to diving leadership, this is the first step in the process. Students in the Master Diver course become proficient in several specialty areas including: deep navigation, night/low visibility diving, search and recovery, and underwater mapping.

**Divemaster** - a full year course - credits - 1.00

The Scuba Diving International (SDI) Divemaster course helps provide the leadership skills required to assist in training and be responsible for certified divers. This rating is also the first level of professional membership within SDI and helps meet

prerequisites for other leadership courses. SDI Divemasters can fulfill several roles, including: Dive supervisor and underwater guide. The knowledge, skills and attitude developed during Divemaster training serve as the foundation for higher levels of accomplishment.

## Aeronautical Science and the Aviation Academy

### Upper School Aviation Course Selections

Aeronautical Science I Aeronautical Science II	Embry Riddle Aviation-Dual Enrollment Aviation Academy
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### Upper School Aviation Course Descriptions

**Aeronautical Science I** - a full year course: credits -1.00

Upper school students are exposed to a dynamic, hands-on learning environment. During the course of the year, we will cover the following: Private Pilot operations, Aerodynamics, Navigation, Aviation weather reports, Cross-country flight planning and Balsa aircraft design and flight. Instructional aids include FAA approved computer-based simulators, aircraft instruments, an on-site weather station, sectional charts and numerous instructional media.

*Prerequisite: None*

**Aeronautical Science II** - a full year course: credit - 1.00

Upper school course designed to enhance and highlight student interest areas. Possible areas of study: Aerodynamics, Flight physiology, Accident investigation, Advanced navigation, Aviation weather, Balsa aircraft design and performance, Aviation history, Aircraft systems, Aircraft performance analysis, Private Pilot Pre-solo maneuvers. Students will be required to receive 5-hours of flight training and 3-hours of observer flights. The 5-hours will serve as an introduction to various types of single engine aircraft. Students will fly 1 hour in a C172N, C172SP, PA28 and a C162. These hours will accumulate towards the Private Pilot flight training requirements. There will be an extra fee to cover materials and flight instruction required for this course.

*Prerequisite: Aeronautical Science I or instructor approval*

**Embry Riddle Aviation** - full year course: credit - 1.00

Embry-Riddle Aeronautical University dual enrollment course is designed to develop the aeronautical knowledge required for certification as a Private Pilot with an Airplane Single Engine Land rating. It provides the basic knowledge and skills to establish a firm foundation for a career as a professional pilot through the practical application of basic aerodynamics, aircraft performance, regulations, and flight planning in single pilot, single-engine aircraft. Students that successfully pass the course with a 70% or higher will receive 5-college credits from Embry-Riddle Aeronautical University. This course is a prerequisite for the Aviation Academy.

**Aviation Academy** - full year course: credit - 3.00

The Aviation Academy program at Admiral Farragut is a professional flight-training program for students seeking to earn a Private Pilot license. Students will receive three elective hour credits as follows: Aeronautics, Aeronautical Science/Math and Aerodynamics. Instructional aids include three FAA approved computer-based simulators, aircraft instruments, an on-site weather station, sectional charts and numerous instructional media. Flight training is conducted at Albert Whitted Airport in Cessna 172 aircraft. Students will be expected to follow and complete each lesson of the Private Pilot training syllabus before advancing to the next lesson. At the completion of the course, students will have met all FAA training requirements and be eligible to take the private pilot exam check ride to earn their pilot's license. Students must be at least 17 years of age to be eligible to take the private pilot exam check ride. There is a substantial fee required for this course.

*Prerequisite: Must be 17 years old to earn the Private Pilot license / approval of the instructor*

## Engineering

Project Lead The Way (PLTW) prepares students to be the most innovative and productive leaders in science, technology, engineering, and mathematics (STEM) and to make meaningful, pioneering contributions to our world. PLTW partners with middle schools and high schools to provide a rigorous, relevant STEM education. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and a love for learning. The PLTW middle and high school STEM education programs give students a brighter future by providing them with a foundation and proven path to college and career success in STEM-related fields. STEM education is at the heart of today's high tech, high-skill global economy.

### Pathway to Engineering Program

The PLTW Pathway to Engineering Program is a curriculum that is designed to encompass all four years of high school. Foundation courses are supplemented by a number of electives to create nine rigorous, relevant, reality-based courses. Activities are hands-on and project-based. Students learn how to use the same industry-leading 3D design software that's used by companies like Intel, Lockheed Martin and Pixar. They explore aerodynamics, astronautics and space life sciences. Hello, NASA. They apply biological and engineering concepts related to biomechanics – think robotics. Students design, test, and actually construct circuits and devices such as smartphones and tablets, and work collaboratively on a culminating capstone project. Some PLTW students have even received US patents.

### Upper School Engineering Course Selections

Introduction to Engineering Design Introduction to Robotics Design Thinking	
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### Upper School Engineering Course Descriptions

**Introduction to Engineering Design Course Description (IED)** - full year course: credit - 1.00

In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. This course is designed for 9th or 10th grade students. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation.

**Introduction to Robotics** - full year course: credit - 1.00

This course provides students with a foundation in content and skills associated with robotics and automation, including artificial intelligence, electronics, physics, and principles of engineering.

**Design Thinking** - full year course: credit - 1.00

This Design Thinking course will take an approach to learning that emphasizes developing students' creative confidence. Students will engage in hands-on design challenges that focus on developing empathy, promoting a bias toward action, encouraging ideation, developing metacognitive awareness, and fostering active problem solving. This course will offer new ways to be intentional and collaborative when designing new solutions for the classroom, school, and community. It will hone the students' skills and will empower them to create desirable solutions. In this course, a series of steps will be taught that will help develop new, innovative solutions designed with people at the center.

## Social Studies

The major goal of the Social Studies Department is to foster the development of students not only into productive members of society, but also into active members of the world community. As defined by the National Council for Social Studies, a comprehensive Social Studies curriculum integrates the study of the social sciences and humanities, as well as the study of relevant material from other disciplines, including math and the natural sciences. Successful completion of Admiral Farragut Academy's Social Studies curriculum requires students to demonstrate mastery of 21st-century research, and the writing and technology skills necessary for success in college and the workplace. These skills will be developed through a variety of learning activities, many of which are project-based and require students to work in teams. Throughout the curriculum, students will also learn about and come to appreciate the cultural diversity of our world, a process made much easier as a result of their education at a school with an extremely cosmopolitan student body.

### Upper School Social Studies Course Selections

8th U.S. History	American Government
World History	American Government Honors
World History Honors	AP American Government
American History	Economics
American History Honors	Economics Honors
AP U.S. History (APUSH)	Geography
Western Civilization Dual Enrollment	Geography Honors
Twentieth Century World History Dual Enrollment	AP Human Geography
	Psychology



## Upper School Social Studies Course Descriptions

### **Social Studies 8: U.S. History** - a full year course: credits – 1.00

8th U.S. History develops students' knowledge of the fundamental events, personalities, and ideas that have shaped American history from the arrival of the first Americans to the Civil War and Reconstruction. Units of study include the Native Americans, European exploration of the Americas, colonial America, the American Revolution, the United States Constitution, America during the early 1800s, the Civil War, and Reconstruction. By completing required research, writing and group projects, students will demonstrate higher-level academic skills including the mastery of advanced features of Google Applications.

*Prerequisite: Successful completion of Social Studies 7*

### **World History** - a full year course: credits – 1.00

World History is a year-long global studies course designed to develop students' knowledge of the key figures, events, ideas, and cultural developments that have shaped human history from the rise of the world's first agricultural settlements in circa 8,000 B.C.E. to the present. Students will focus on the processes and causes of continuity and change throughout human history. Major units of study include the rise of civilization, the development of the world's great philosophical systems, Classical Greece and Rome, ancient empires of India and China, the Middle Ages, the Renaissance and Reformation, the Enlightenment and nationalist revolutions, the Age of Imperialism, the era of the world wars, the Cold War, and regional conflicts from the 1990s to the present. Throughout the course, students will develop important reading, research, note-taking, and writing skills through the completion of various classroom exercises and periodic writing assignments. They will demonstrate mastery of core content through the completion of technology projects that require them to master popular software including *Google Apps*.

*Prerequisite: Successful completion of 8th grade U.S. History*

### **World History Honors** - a full year course: credits – 1.00

World History Honors is a year-long global studies course designed to develop students' knowledge of the key figures, events, ideas, and cultural developments that have shaped human history from the rise of the world's first agricultural settlements in circa 8,000 B.C.E. to the present. Students will focus on the processes and causes of continuity and change throughout human history. Major units of study include the rise of civilization, the development of the world's great philosophical systems, Classical Greece and Rome, ancient empires of India and China, the Middle Ages, the Renaissance and Reformation, the Enlightenment and nationalist revolutions, the Age of Imperialism, the era of the world wars, the Cold War, and regional conflicts from the 1990s to the present. Throughout the course, students will develop important reading, research, note-taking, and writing skills through the completion of various classroom exercises and periodic writing assignments. They will demonstrate mastery of core content through the completion of technology projects that require them to master popular software including *Google Apps*. Because this is an Honors course, students will be required to complete more rigorous coursework than in the regular sections of this course. This coursework includes more advanced reading, research and writing assignments that will be evaluated according to higher standards.

*Prerequisite: 85 percent or higher in 8th grade U.S. History*

**American History** - a full year course: credits – 1.00

In 10th grade, students survey the course of American history from the Civil War and Reconstruction to the present. Emphasis is placed on the evolution of the U.S. political system, major social and cultural developments, American innovation and exceptionalism, and the U.S.' growing role in international affairs. Throughout the course, students will complete assignments, projects, and activities that involve collaborative effort and develop research, writing, and speaking skills using Google Apps and other innovative software applications.

*Prerequisite: Successful completion of World History.*

**American History Honors** - a full year course: credits - 1.00

As with the American History course, in 10th grade, students survey the course of American history from the Civil War and Reconstruction to the present. Emphasis is placed on the evolution of the U.S. political system, major social and cultural developments, American innovation and exceptionalism and the U.S.' growing role in international affairs. Throughout the course, students will complete assignments, activities, and projects that involve collaborative effort and develop research, writing, and speaking skills. Because this is an Honors course, students will be required to complete more rigorous coursework than in the regular sections of this course. This coursework includes more advanced reading, research and writing assignments that will be evaluated according to higher standards.

*Prerequisite: Successful completion of World History*

**AP United States History** –a full year course: credits - 1.00

The Advanced Placement version of the United States History course prepares students for the Advanced Placement examination in American History. As stated by the College Board, “the Advanced Placement Program in United States History is designed to provide students with the analytic skills and content representative of various facets of contemporary American historiography. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by introductory college courses. In addition to essential primary and factual information, this course also acquaints students with a variety of scholarly interpretations of major historical issues.

*Prerequisite: Approval of instructor, Department Chair, and Upper Division Head; 85 percent or higher grade in World History; successful completion of AP coursework during the summer prior to the course.*

**Western Civilization (Honors)** - a one semester course: credits – 0.50

Western Civilization Honors (Development of Western Civilization I) is a semester-long elective dual enrollment course tracing the origins of the civilization that arose in the ancient Near East, matured in Europe during the Middle Ages, and spread to much of the rest of the world in modern times. Emphases are placed on the development of cultural signatures that continue to define the West today and the historical developments, figures, and ideas that have most shaped Western history. Students will also study the major artistic, architectural, and literary developments that continue to influence the contemporary Western aesthetic. During the course, students will be required to complete a number of writing assignments, projects and activities that require them to develop research, reading, writing, and speaking skills necessary for success in college and the workplace. They will also work in groups to develop important collaborative skills. Because this is an honors

course, students will be required to complete more rigorous coursework than in typical Social Studies courses. As a result, students must complete an application and qualification process required by Saint Petersburg College prior to the start of the course (usually the semester before). To qualify, they must have a 3.0 unweighted Upper School grade point average or a 3.0 unweighted Upper School Social Studies grade point average. They also have to prove that they have qualifying ACT or SAT scores or achieve qualifying scores on the Reading and Writing college placement subtests given at Saint Petersburg College.

*Prerequisite: Approval of Upper School Head and Department Chair, 3.0 unweighted Upper School GPA or 3.0 unweighted Upper School Social Studies GPA, and qualifying SAT, ACT or Saint Petersburg College college placement test subscores in Reading and Writing*

### **Twentieth Century History (Honors)** – a one semester course: credits - 0.50

This dual enrollment elective course is a survey of significant world political, social, economic, and cultural developments from 1900 to the present. Major units of study include the development of the European-dominated global system at the end of the nineteenth century, European imperialist and militarist competition as a cause of World War I, and World War II as the defining event of the twentieth century. Other major topics include: the Russian Revolution, the rise of fascism, Nazism, Asian neo-imperialism, the Great Depression and its consequences, World War II, the Cold War, communist China, the rise of the “Third World,” and conflicting issues and values in contemporary society. Students examine these topics through readings, lectures, technology projects, and the completion of writing assignments.

*Prerequisite: Approval of Upper School Head and Department Chair, 3.0 unweighted Upper School GPA or 3.0 unweighted Upper School Social Studies GPA, and qualifying SAT, ACT or Saint Petersburg College college placement test subscores in Reading and Writing*

### **American Government** - a one semester course: credits – 0.50

This course is an introduction to the United States government and covers the period from colonial times to the present. Major units of study include the influence of Enlightenment ideas and the British Constitution on American government, the American Revolution, the Constitutional Convention, and the United States Constitution. Students spend substantial time analyzing the executive, legislative, and judicial branches of the Federal government. During the final unit of the course, students examine the structure of the United States economic system and explore its central role in the global economic system. This unit acts as a lead in to the second semester economics course,

*Prerequisite: Successful completion of World History, American History*

### **Economics** - a one semester course: credits – 0.50

This course introduces the United States economy on both the micro and macro levels of analysis. While the course devotes considerable time to discussing socialist and communist economic systems, the majority of the coursework revolves around capitalism, particularly the modified capitalist system of the United States economy. This course begins with discussions and readings concerning economic theories and concepts, continues through an introduction to microeconomic and macroeconomic analysis, and concludes ultimately with readings relating to government controls and interventions in the economy.

*Prerequisite: Successful completion of World History, American History*

**AP U.S. Government and Politics** - one semester course credit:-0.5

AP United States Government and Politics develops students' knowledge of the institutions, groups, beliefs and ideas that have shaped and continue to shape the American political system. First, students will trace the general historical development of the American political system from the colonial period to the present. They will also learn the general concepts used to interpret United States politics and government and will use this knowledge to analyze specific examples in American political history. Throughout the course, students will become acquainted with the wide variety of theoretical interpretations of American political behaviors and outcomes. They will also focus on the consequences of such behaviors.

*Prerequisite: Approval of Instructor, Department Chair, and Upper Division Head; 85 percent average in World History; Successful completion of Economics during the Fall Semester*

**Geography**- a full year course: credits – 1.0

The primary content emphasis for this course pertains to the study of world cultural regions in terms of location, physical characteristics, demographics, historical changes, land use, and economic activity. Content should include, but is not limited to, the use of geographic tools and skills to gather and interpret data and to draw conclusions about physical and human patterns, the relationships between physical geography and the economic, political, social, cultural and historical aspects of human activity, patterns of population growth and settlement in different cultures and environments, the interaction between culture and technology in the use, alteration and conservation of the physical environment, and the interrelationships and interdependence of world cultures.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**Geography Honors**- a full year course: credits – 1.0

The primary content emphasis for this course pertains to the study of world cultural regions in terms of location, physical characteristics, demographics, historical changes, land use, and economic activity on an honors level. Content should include, but is not limited to, the use of geographic tools and skills to gather and interpret data and to draw conclusions about physical and human patterns, the relationships between physical geography and the economic, political, social, cultural and historical aspects of human activity, patterns of population growth and settlement in different cultures and environments, the interaction between culture and technology in the use, alteration and conservation of the physical environment, and the interrelationships and interdependence of world cultures.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**AP Human Geography**- a full year course: credits – 1.0

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**Psychology**- a full year course: credits – 1.0

This course is a general introduction to the study of human behavior as defined by major conceptual approaches, theories, principles, and research domains of contemporary psychology. The course covers a broad range of topics including learning

processes, the development of personality, psychological development, and dysfunction, the psychology of group behavior and social attitudes. The study of these topics helps students develop an understanding of the many forces that influence behavior.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**AP Psychology**- a full year course: credits – 1.0

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

## Foreign Languages

The mission of the foreign language department of Admiral Farragut Academy is to not only instill in the school's young men and women the ability to communicate in another language, but to broaden and deepen their understanding and appreciation of the living culture of which that language is but one expression. Teaching the languages of Spanish and Chinese, the foreign language department develops a curriculum that is relevant to the experiences and values of the younger generation of today and tomorrow. Daily lessons rarely consist of the dry, repetitive drills of yesterday's foreign language classroom. Rather, they are absorbing, challenging and dynamic activities that engage the learner through multiple senses. It is a requirement for graduation that a student must take at least two consecutive years of the same language. The curriculum consists of four years of Spanish and three years of Chinese, including dual enrollment and AP credit at the advanced levels of Spanish. All grades of the Elementary School receive foreign language instruction.

### Upper School Foreign Languages Course Selections

Spanish I	Chinese I
Spanish I Honors	Chinese I Honors
Spanish II	Chinese II
Spanish II Honors	Chinese II Honors
Spanish III	Chinese III Honors
Spanish III Honors	Chinese IV Honors
Spanish IV Honors	AP Chinese
AP Spanish	

## Upper School Foreign Languages Course Descriptions

### **Spanish I** – a full year course: credits - 1.00

The emphasis in this course is on acquiring a foundation in the basic skills of listening, speaking, reading, and writing, with focus on reading and listening. Students learn a foundation of grammar and begin to develop a competence in expressing themselves at a fundamental level, at the same time as they receive an introduction to aspects of Hispanic culture and literature. Technology is encouraged to reinforce classroom work, through the Language Lab, weekly.

### **Spanish I Honors** – a full year course: credits - 1.00

Spanish I Honors is an advanced beginner course for students who have taken at least a year of Spanish. The four basic skills of listening, speaking, reading, and writing, with focus on reading and listening are presented in greater depth and at a faster pace than in Spanish 1. Students learn a foundation of grammar and develop a competence in expressing themselves at a fundamental level, at the same time as they receive an introduction to aspects of Hispanic culture and literature.

*Prerequisite: At least one year of Spanish, or placement test given by Department.*

### **Spanish II** – a full year course: credits - 1.00

Students hone their skills in the four areas of language expression, placing an increased emphasis on communicating exclusively in Spanish. There is an acquisition of more advanced vocabulary than used in the first year course, as reading selections become longer and more sophisticated. Through viewing of films and exposure to regalia, the course interweaves an appreciation of Hispanic culture into the language-learning activities.

*Prerequisite: Successful completion of Spanish I*

### **Spanish II Honors** - a full year course: credits - 1.00

Spanish 2 Honors is an advanced course where the four basic skills of listening, speaking, reading, and writing, with focus on reading and listening are presented in greater depth and at a faster pace than in Spanish 2. Spanish 2 Honors is a course that builds upon the basic communication skills mastered in the Spanish I Honors course. The object of this course is to development in the four basic skills of communication in Spanish: listening, speaking, reading and writing. The student will be expected to use these skills in communication within situations studied. In addition, the student will study aspects of Hispanic culture and history via a variety of media.

*Prerequisite: Successful completion of Spanish I Honors, Strong A average in Spanish 1, Approval of Instructor, Department Chair, and Division Head*

### **Spanish III** - a full year course: credits - 1.00

Spanish 3 is a course that builds upon the basic communication skills mastered in the Spanish 2 course. The object of this course is to continue to reinforce the four basic skills of communication in Spanish: listening, speaking, reading and writing. The student will be studying vocabulary and grammatical concepts. The student will be expected to use these skills in communication within situations studied. In addition, the student will study aspects of Hispanic culture and history via a variety of media.

**Spanish III Honors** – a full year course: credits - 1.00

This is a course conducted virtually exclusively in Spanish. Memorization of grammar rules becomes less important as the ability to use the language becomes paramount. The vocabulary used in conversation and class readings is more technical than in the first two years, deriving from such specialized areas as technology, the arts, ecology, and the economy. This higher level of vocabulary enables the student to learn about Hispanic culture in a more realistic way.

*Prerequisite: Successful completion of Spanish II, Approval of Instructor, Department Chair, and Division Head*

**Spanish IV Honors** - a full year course: credits - 1.00

In this course, students refine their language skills through an extensive grammar and vocabulary review by writing essays, delivering oral reports, and working on listening practice. Spanish is used constantly in class discussions. Communication in Spanish is refined as the student is guided to becoming conversational. Class work includes discussion of current events and assigned readings as well as oral and written presentations. Compositions or essays increasing in length are turned in throughout the year. Grammar concepts are reviewed in this way as well as through the use of a grammar workbook. A series of short stories from various Spanish speaking countries is included in the reading selections for this course. Spanish civilization is discussed through the study of history and culture. The speaking component of the grade will focus on both work online as well as classroom presentations and participation.

*Prerequisite: Successful completion of Spanish 3 Honors, Approval of Instructor, Department Chair, and Division Head*

**Advanced Placement Spanish Language and Culture** - a full year course: credits - 1.00

This advanced conversation and composition course is recommended for those students that have excelled at the fourth year Spanish Honor level program and wish to continue advancing their proficiency in the language. This class will be conducted entirely in Spanish appropriate to this level. The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

*Prerequisite: Successful completion of Spanish4 Honors, Approval of Instructor, Department Chair, and Division Head*

**Chinese I** - a full year course: credit - 1.00

The purpose of this course is for students to speak, read, and write Chinese at a basic level. The focus is on the Chinese Pinyin Romanization system, or Chinese simplified characters. This course also employs computer skills, using Chinese programs provided on computers in Language Lab.

**Chinese II** - a full year course: credit - 1.00

This course is designed for those who have taken Chinese I, or who have the equivalent knowledge and skills. The purpose is to acquire basic understanding, speaking, reading, and writing of Chinese. There is an extensive utilization of cultural material and information.

*Prerequisite: Successful completion of Chinese I, Approval of Instructor, Department Chair, and Division Head*

**Chinese III Honors** - a full year course: credit - 1.00

The purpose of this course is to enable students to enhance proficiency in Chinese through a linguistic, communicative, and cultural approach to language learning. There is continued emphasis on the development of listening, speaking, reading, and writing skills. Experiences with Chinese literature are broadened. Cross-cultural understanding is fostered and real-life applications are emphasized throughout the course.

**Chinese IV Honors** - a full year course: credit - 1.00

This is an advance course that reviews and further develops skills learned in previous years. It is designed for those who have taken at least 3 years of Chinese. The purpose of this course is to enhance proficiency in Chinese writing, reading and understanding. During the course of year, students will focus on project-based learning, such as making a resume, preparing for a job interview, read and discuss poetry and newspaper articles. Students will continue to expand and refine their vocabulary and review grammar.

**Advanced Placement Chinese** - a full year course: credit - 1.00

AP Chinese Language and Culture course is designed to provide students with various opportunities to further improve their proficiency in listening, speaking, reading, and writing skills to be ready for the AP Chinese exam held every May. Students enrolled in this course will also have the maximum exposure to Chinese cultural elements that are integrated in the process of learning the language. This course includes a laboratory component designed to meet College Board standards and has been reviewed and approved by the College Board.

The primary goal of this course is to enable students to master conventions of communication through the exploration of topics reflecting multiple aspects of Chinese society and culture. The general flow of a unit comprises vocabulary, sentence patterns, text analysis, application of vocabulary and patterns, supplementary reading, and finally, writing assignments and tests. Students should be able to achieve the following objectives:

- Develop communicative competence in listening, speaking, reading, and writing skills.
- Understand the textbook lessons and supplementary materials and participate in discussions of the cultural aspects of the readings in Chinese.
- Use the knowledge gained through course materials to develop critical thinking and writing skills to compose essays in Chinese on given topics.
- Use the Chinese language to communicate effectively both in the school setting and in real-life situations.
- Use the Chinese language as they seek clarifications through the use of communication and language learning strategies that are running elements of the course.
- Carry on a conversation or a discussion with other students in class.

The content should include, but not be limited to, the following: conversational expression of feelings, ideas, and opinions in Chinese, comprehension of spoken and written Chinese, oral and written presentation of information and ideas, in Chinese,



to an audience, social interaction patterns within Chinese culture(s), connections between the Chinese language and culture(s) and other disciplines, communication patterns of languages, and Chinese language usage within and beyond the school setting.

## AP Capstone

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses.

In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic paper.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option.

### Upper School AP Capstone Course Selections

AP Seminar AP Research (available in 2019)	
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**AP Seminar** - a full year course: credit - 1.00

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**AP Research** - a full year course: credit - 1.00

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 of 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. *Prerequisite: Successful completion of AP Seminar, Approval of Instructor, Department Chair, and Division Head*

## Fine Arts

The Fine Arts Program is highly diverse and comprehensive in all its divisions. Included are courses in instrumental music, music history, visual arts, and theater. A highly trained faculty motivates the students to discover for themselves a means of expression as well as an appreciation for the arts.

### Upper School Fine Arts Program Course Selections

Band I	Art Comprehensive I
Band II	Art Comprehensive II Honors
Band Honors	Graphic Design
Drama	Chorus I
	Film and Animation

### High School Fine Arts Program Course Descriptions

#### Music

**Band I, II and Honors** – a full year course: credits - 1.00

This performing ensemble serves the school and community by performing in parades, athletic events, military services, and other school performances. Students in this yearlong class concentrate on various works ranging from marches to jazz with emphasis on personal musical growth. Breathing, intonation, tone, musicality, technique, and scales, et al, receive emphasis. The difficult level of music necessitates a daily practice regime. This is Admiral Farragut Academy’s premiere instrumental ensemble. This course is available for continuation every year for credit.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**Chorus I** – a full year course: credits - 1.00

This year-long, entry-level class, designed for students with little or no choral experience, promotes the enjoyment and appreciation of music through performance of beginning choral repertoire from a variety of times and places. Rehearsals focus on the development of critical listening skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

## Art

**Art Comprehensive I** – a full year course: credits - 1.00

This one-year course introduces students to the Elements of Art and Principles of Design while developing drawing skills and painting techniques. Studio experiences in the classroom will give students opportunities to experience a variety of media (pencil, pen, ink, charcoal, and paint) while developing student's individual style and creative problem solving skills. Students will demonstrate their ability to respond, to analyze and to interpret their own artwork and the work of others through discussions, critiques, and writings.

**Art Comprehensive II Honors** - a full year course: credits - 1.00

This course is intended for cadets who have already taken a foundation year of art, and are looking to further their skills in drawing, painting, and printmaking. Students will be guided through more challenging projects and given increased independence as the year progresses by developing a body of work and organizing a portfolio.

*Prerequisite: one year of foundation Art or approval of instructor*

**Graphic Design** – a full year course: credits - 1.00

This is a course in which students will express their original creativity visually and develop and showcase their ability to communicate ideas through a variety of graphic media. Students learn the basics of graphic design in preparation of original art combining typography, page layout, and integrated graphic elements. Instruction will be given in the following areas: Elements of art and principles of design; mechanical and computer design methods; printmaking; finishing of graphic products; and historical and cultural development of graphics and the printing industry. The course will give the students confidence in organizing ideas, creating meaning in their original work, and the ability to work ideas into new and useful creations.

## Drama

**Drama** – a full year course: credits - 1.00

Students absorb the history of theater, stage production, basics of acting, sets, props, and improvisation. Also covered in this course are the technical aspects and operation of lighting and sound equipment. Participation in all school stage productions is required.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

## Film and Animation

**Film and Animation** – a full year course: credits - 1.00

Using clips from a wide variety of movies, cadets will study both animation and live-action film-making as an art form, from

idea conception through to the post-production process. Classes include daily film analysis and lectures, with occasional written responses to longer clips or full-length movies.

## Health and Physical Education

The goal of the Health and Physical Education Department at Admiral Farragut Academy is to help establish patterns of behavior that assist a person in achieving complete health. A balance of physical, mental, social, and emotional well-being accomplishes this goal. The courses offered give the student the opportunity to acquire basic health knowledge, expand life/fitness skills, and develop positive attitudes about life. Development of a healthy body and a healthy mind assist young people in living a more active, productive, and successful life.

### Health and Physical Education Course Selections

8th Grade Physical Education Personal Fitness	Weight Training Sports Medicine
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### High School Physical Education Department Course Descriptions

**8th Grade Physical Education (P.E.)** - a semester course, mandatory for all 8th grade cadets

Physical Education – The Physical Education program provides each student with the opportunity to participate in a comprehensive program consisting of skill development, lead up games, team sports, and physical fitness activities. The students receive instruction in rules, skills, and strategies associated with the different sports as well as learning experiences involving physical conditioning activities. The students will also have opportunities to become involved in lifelong physical activities through individual sport units. The program promotes the spirit of cooperation, leadership, fair play, and friendly competition.

**Personal Fitness** - a full year course: credits - 1.00

In order to effectively instruct the wellness standard of Admiral Farragut Academy, the Personal Fitness and Nutrition Course will provide both classroom and practical instruction in physical, and sports conditioning along with instruction on proper nutrition.

**Weight Training** - a full year course: credits – 1.00

This course introduces the basics of weight training, placing an emphasis on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight-training program.

*Prerequisite: Approval of Instructor, Department Chair, and Division Head*

**Sports Medicine:** full year course; elective

Sports Medicine is an introduction to the six domains of the athletic training profession: injury prevention, clinical evaluation and diagnosis, immediate care, treatment, rehabilitation and reconditioning, organization and administration, and professional responsibility. Course work will include weekly injury reports, discussions pertaining to each chapter, in-class participation, and ten hours of out of class participation per quarter.

## **Naval Science**

The Naval Service Training Command prescribes the courses for naval science for NJROTC units that comprise the 3 or 4-year curriculum. The naval science program is constructed to include three academic classroom sessions and two activity periods per week. The curriculum is based on 40-minute sessions of instruction for 36 weeks, with 180 teaching days. This equates to 7200 minutes of contact instruction (72 hours of classroom instruction and 48 hours of activities including military drill and athletics). Adjustments for class length other than 40-minute periods, as well as staggered, rotating or modular schedules, are made at the local school level.

- This program of 7200 minutes of instruction equates to one Carnegie unit or one credit per year toward graduation as an elective or other subject credit approved by school authorities.
- It is desired that all topics provided in the curriculum be covered, but the depth of coverage must be determined by each instructor according to the needs of his/her students. Major curriculum content changes are not to be made without the prior approval of the Naval Service Training Command.

### **What subjects are included in the curriculum?**

The Naval Service Training Command routinely updates the curriculum to include new texts, instructional materials and lesson plans. The curriculum is developed and revised by civilian educators and NJROTC instructors. The wide variety of subjects includes the following:

- CITIZENSHIP -- Instillation of values of good, responsible citizenship.
- NAVAL ORIENTATION -- Basic introduction to the Navy's customs and traditions.
- NAVAL OPERATIONS/ORGANIZATION -- Familiarization with national naval strategy and daily military operations.
- NAVAL HISTORY -- History of the United States Navy from the colonial period to the present.
- NAVIGATION -- Introduction to piloting and navigation.
- SEAMANSHIP -- Introduction to basic seamanship and ship handling.
- LEADERSHIP -- Ongoing study of leadership, with opportunities to develop leadership abilities.
- NAUTICAL ASTRONOMY -- Study of astronomy and its use in navigation.
- ELECTRONICS -- Introduction to electronics as the basis for communications and weapons systems.
- OCEANOGRAPHY -- Information on the collection of data on the world's ocean systems.
- DRILLS, COMMANDS, AND CEREMONIES -- Close order drill and parade ceremonies.
- PHYSICAL FITNESS -- Activities to promote healthy, active lifestyles.

### **Upper School Naval Science Course Selections**

Naval Science I Naval Science II	Naval Science III Naval Science IV
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## Upper School Naval Science Course Descriptions

### **Naval Science 1**

**PURPOSE:** To introduce students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; promote an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, and controlling stress; drug awareness; provide the principles of health and first aid, geography and survival skills and an overview of Naval ships and aircraft. These elements are pursued at the fundamental level.

**COURSE CONTENT:** Includes introduction to the NJROTC program; introduction to Leadership, Citizenship and the American Government; introduction to Wellness, Fitness, and First Aid to include diet, exercise and drug awareness, introduction to Geography, Orienteering, Survival and Map Reading Skills; Financial Skills and introduction to the U. S. Navy.

### **Naval Science 2**

**PURPOSE:** To build on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership, and to introduce cadets to the technical areas of naval science and the role of the U. S. Navy in maritime history and the vital importance of the world's oceans to the continued well-being of the United States.

**COURSE CONTENT:** Includes ongoing instruction into Leadership; introduction to Maritime History, including the American Revolution, Civil War, the rise of the U. S. to world power status, World Wars 1 and 2, the Cold War Era and the 1990s and Beyond; introduction to Nautical Sciences to include Maritime Geography, Oceanography, Meteorology, Astronomy, and Physical Sciences.

### **Naval Science 3**

**PURPOSE:** Broaden the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, and the importance of sea power and national security. Students gain a more in-depth knowledge of Naval ships and aircraft and an introduction to marine navigation and seamanship.

**COURSE CONTENT:** Includes instruction in Sea Power and National Security, Naval Operations and Support Functions, Military Law, and International Law and the Sea. Provides introduction to Ship Construction and Damage Control, Shipboard Organization and Watch Standing, Basic Seamanship, Marine Navigation, and Naval Weapons and Aircraft. Ongoing instruction in leadership, citizenship and discipline.

### **Naval Science 4**

**PURPOSE:** Focused primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. Seniors are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them.

**COURSE CONTENT:** Includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long-range life goals.