

# ALABAMA SCHOOL OF FINE ARTS CURRICULUM CATALOG

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# **ALABAMA SCHOOL OF FINE ARTS**

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## Alabama School of Fine Arts: Intensive & Advanced Specialty Focus

ASFA has a unique mission unlike any other public school in Alabama or most other states. ASFA exists exclusively for students who wish to pursue an extraordinary passion in one of six **specialty** areas of study. The quality of our **advanced specialty curricula** is superior and taught at college-level, and the requirements and expectations of our **specialty areas are intensive and demanding**. In order for us to exist and thrive, we also provide the 4 x 4 academic courses of study as required by the Alabama State Board of Education for an advanced high school diploma. While we are proud of our core academic offerings and their quality\*, **prospective students and parents must understand** that core academics serve a role of supporting our students in making them college-ready while **they focus on their intensive specialty area**.

\*Our core academics are of high quality and thoroughly prepare students for college while exceeding the minimum requirements of a national *common core* or *standards based curriculum*, although we do not adhere to a prescribed curricular program. Many of our core courses are taught at advanced, honors levels without carrying standardized labels such as "advanced placement" or "international baccalaureate." Annually, ASFA students gain acceptance to top tier colleges, universities, arts institutes and professional performance companies and earn more scholarship money than most other students in the state.

# **Mission Statement**

The mission of the Alabama School of Fine Arts, a diverse community of explorers, is to nurture impassioned students by guiding and inspiring them to discover and fulfill their individual creative abilities in an atmosphere distinguished by the fusion of fact and feeling, risk and reward, art and science, school and society.

# **Accommodation Statement**

ASFA was created by the State to provide a more challenging education for impassioned, talented students in Creative Writing, Dance, Math & Science, Music, Theatre Arts and Visual Arts. Consistent with its mission, only those students will be admitted to ASFA and allowed to remain who are able to meet the demands of a rigorous curriculum. Applicants with existing Individualized Education Plans (IEP) are obliged to inform ASFA administration during the application period and to provide a copy or authorization for release of the applicant's most recent IEP and any related records deemed necessary by ASFA. If a qualifying disabling condition is substantiated before or after enrollment, a committee appointed by the President will determine if the school can reasonably accommodate the student's needs or if these needs will be better accommodated in a different educational environment.

# **Required Core Credits**

To graduate from the Alabama School of Fine Arts, all students must satisfy specialty curriculum requirements and complete core academic courses specified by the State of Alabama and ASFA. Those required core credit courses must be completed in grades 9-12 and include the following:

English – 4 credits (1 each, grades 9-12) 8 semesters Social Studies – 4 credits (1 each, grades 9-12) 8 semesters Mathematics – 4 credits (1 each, grades 9-12) 8 semesters Science – 4 credits (1 each, grades 9-12) 8 semesters Foreign Language – 2 credits (consecutive in same language, grades 9-12) 4 semesters Fine Arts – 1.5 credits for Math/Science students (grades 9-12) 3 semesters Health & Wellness – 1.5 credits Computer Applications – .5 credits

The school also offers numerous elective courses, subject to student interest, staff availability, the school's instructional priorities and funding.

#### Junior High Students

All junior high students are required to participate in physical education by taking Health & Wellness courses, complete a computer skills course, and have a traditional study hall period.

## **Certificates and Diplomas**

ASFA shall issue Diplomas to students who complete curriculum, performance and grade requirements within an ASFA specialty department, *plus* all requirements for a regular high school diploma as specified by the State of Alabama and the Alabama Department of Education. An ASFA student who completes either the requirements of a specialty department or state course requirements, but not both, shall receive a Certificate of Completion, indicating the requirements met by the student. A student who remains enrolled in ASFA through application of state and federal law superseding ASFA probation policy may receive a Certificate of Completion for the specialty or core academic requirements met; such a student who meets neither set of requirements may receive a Certificate of Attendance. Participation in a ceremony approved by the President or designee for the purpose of awarding diplomas and certificates is a privilege granted to specific students by the President based on students' performance and behavior. To participate in a diploma or certificate ceremony, graduating seniors shall end second semester with specialty, core, and specialty-core-combined grade averages at or above the minima specified in 356-X-6-.22 of the ASFA Policy Manual to avoid probation, and attendance, participation and tardiness requirements as specified in 356-X-6.23 to avoid probation.

# **Progress Reports/Report Cards**

PowerSchool is a free web-based student information application that gives parents/guardians and students on-line access to grades. Progress Report grades and Report Card grades are viewable online via the PowerSchool Parent Portal on the school's website. Progress Report\* grades are published for all core academic courses at the mid-point of each quarter, and Report Card grades are published for all classes at the end of each quarter and semester.

\*There are no published progress reports for most required fine arts specialty courses.

# **Grade Requirements and Probation Policy**

See the ASFA Student Handbook for details about grade requirements and probation policy.

# Alternative Learning Program (ALP)

ALP is a program through which students may receive credit for non-major courses by working outside the formal ASFA curriculum. Courses eligible for ALP credit are: computer applications, driver education, fine arts electives (for Math/Science students), or other courses as approved in writing and in advance by the Vice President of Specialty & Academic Studies. All ALP courses will be graded as Pass/Fail (minimum pass = "C"). ALP courses will not be computed as part of a student's GPA. No ALP courses will be approved except in advance.

# **Outside Instruction**

Students enrolled or selected to enroll in the Alabama School of Fine Arts may receive ASFA credit for instruction provided by other educational institutions or entities **only** with the advance written approval of the Vice President of Specialty & Academic Studies. The students will follow the established procedures available in the counseling offices. Failure to gain prior approval will result in credits being denied on the ASFA transcript. In no case will students be allowed to take outside courses in lieu of a required specialty course. Nor can students receive auxiliary specialty instruction without specialty approval. No outside instructional courses will be allowed to supplant the college-prep curriculum ASFA already provides.

# Credit Recovery/Summer School

Summer school is recommended for any student who fails a course during the school year. Students automatically receive summer school recommendations from their counselor in this situation. At the student's expense, credit recovery must be pursued through programs approved by the Vice President of Specialty & Academic Studies and the grade-level counselor. Approved programs include ACCESS Distance Learning (not during the summer term), your local education agency summer school/credit

recovery offerings (the home school and district for which you are zoned), Keystone Online or Correspondence Courses, and The American School Online or Correspondence Courses. Upon completion of a course, it is the responsibility of the student to have final grades sent directly to the ASFA Registrar (kgordon@asfa.k12.al.us).

# **ACCESS Distance Learning**

Access Distance Learning provides web-based courses taught by Alabama certified and highly qualified teachers. This opportunity is available at no cost to the student. ACCESS can be used for credit recovery (except during the summer term) in the event of a failure or as an elective, time and schedule permitting. ACCESS courses cannot supplant the ASFA curriculum and must be approved by the Vice President of Specialty & Academic Studies. Interested students should make arrangements through their grade counselor.

# **Dual Enrollment – Postsecondary Institutions**

(1) The President or, upon the President's recommendation, the Chairman of the Board of Trustees may sign agreements with postsecondary educational institutions, allowing ASFA students to enroll in postsecondary courses to earn dual credits toward an ASFA diploma and a postsecondary degree. Such agreements shall be consistent with applicable policies and regulations of the state Department of Education.

(2) Students shall enroll in dual credit courses only with prior written approval of parent(s) and the President. Only upon determination of exceptional individual circumstances shall the President approve enrollment in dual credit courses that would supplant ASFA courses required by the state Department of Education for high school graduation.

(3) Students and parents will be responsible for all dual credit tuition costs and transportation arrangements.

(4) Students enrolled or selected to enroll in the Alabama School of Fine Arts may receive ASFA credit for instruction provided by other educational institutions or entities only with advance approval by the Vice President of Specialty & Academic Studies. The President shall establish procedures under which the Vice President of Specialty & Academic Studies shall review and act upon student requests to receive such credit.

# The Scheduling Process

Unlike many schools that conduct course scheduling in January or February, ASFA must await the culmination of our annual application/audition/acceptance process in order to estimate enrollment numbers and be inclusive of all students who will be attending the next school year.

Note: Please be aware that "course scheduling" refers only to selecting required/desired courses for an

# upcoming school year; this is not to be confused with general online student registration which every family must complete each year.

This document is designed to give students and parents an overview of scheduling, course registration procedures and information about courses that are usually offered. Scheduling at ASFA is challenging because we function as seven schools in one (6 areas in which students major plus core academics), employ a hybrid of a traditional schedule and a consolidated block schedule and operate with a small, highly specialized faculty. Although our total enrollment is small (approximately 350), we do not have the scheduling ease that large schools enjoy. Often, a course may only be offered one period per day. However, every effort will be made to provide students with the courses for which they have been recommended or have requested. Students may have to select alternate courses because of scheduling conflicts or because of the cancellation of courses due to insufficient enrollment. **To maximize their chances of getting the courses they want, students should use the following the guidelines:** 

- Before selecting courses for the next year, check all criteria, prerequisites, and academic instructional levels.
- List alternative elective courses in the priority order they are to be substituted for course choices that cannot be scheduled.
- Write notes on the course request form that could help us understand your request/needs
- Return the course request form by the announced deadline.

**Step 1:** General information and instructions regarding the course selection process are provided to all students during large group sessions with various advisors and scheduling counselors. The Course Requirements & Selections sheet lists all the courses available to students. (A similar event is conducted for new students a few weeks after acceptance letters are sent and processed.)

**Step 2:** Students make selections and return their Course Selection sheets by the assigned date. **Parents approve students' choices** by consulting with their child and signing the Course Selection sheet. Any student not returning a course selection sheet risks forfeiting the right to choose his or her classes for the next school year.

**Step 3**: Once all course requests are entered and scheduling is completed, students are sent copies (usually in late July/early August).

## Dropping and/or Adding a Course

The deadline for schedule changes is five days after the semester begins. The FINAL day for dropping a class is **prior** to the first progress report. Yearlong courses may **not** be dropped at the end of the first semester.

## **Core Academics** The Humanities & Social Sciences

## English

**English 7** (Grade 7) - Introduces composition writing, which includes a study of basic grammatical structures, and a study of various genres of literature, including an introduction to the different elements of literature. (1 credit)

**English 8** (Grade 8) - Introduces various literary genres including the novel, the short story, drama, nonfiction and poetry. Emphasis is on the formal composition, its structure and form. (1 credit)

**English 9** (Grade 9) - Through the study of World Literature, encourages students to become more strategic in their approach to reading increasingly complex selections. Students learn to synthesize information from texts as they discuss and apply content. Additionally, students expand their control of the writing process. Students complete papers on a variety of subjects (mostly informal in nature) writing in narrative, descriptive, persuasive, and analytical modes. Students experience formal grammar and vocabulary instruction with a focus on improving oral and written communication. (1 credit)

**English 10, American Literature to 1900** (Grade 10) - Focuses on literature, writing, vocabulary, and speaking. English 10 surveys American literature from pre-Colonial through the 19th century, but also includes some contemporary American literature to deepen student understanding of some of the pre-20<sup>th</sup> century texts. Composition instruction focuses on narrative writing, persuasive writing, and essays of literary analysis. Students also complete a research paper for which they must support their analysis of a literary work with published, peer-reviewed literary criticism. Vocab is taught through the literature studied, with students learning and being tested on unfamiliar terms from the texts. Students also complete creative projects and give class presentations to demonstrate their understanding of the literature and develop speaking skills. (1 credit)

American Literature II, from 1900 to the Present (Grade 11) - Surveys American literature of the 20th century to the present. Writing centers on the development of the essay and the research paper. (1 credit)

**British Literature** (Grade 12) - Students study and discuss major British authors and their contributions, literary forms, techniques, and movements. Students will develop and refine their skills in critical thinking and composition. Students will write a documented research paper on a work of British literature. (1 credit)

## Required English Course Sequence for All Students

7<sup>th</sup> Grade – English 7 8<sup>th</sup> Grade – English 8 9<sup>th</sup> Grade – English 9 10<sup>th</sup> Grade – English 10, American Literature to 1900 11<sup>th</sup> Grade – American Literature II, from to 1900 to Present 12<sup>th</sup> Grade – British Literature

## **History/Social Studies**

**Citizenship and Geography** (Grade 7) - Covers the physical and human geography of the Eastern Hemisphere, which includes the countries and cultures of Asia, Africa, Oceania and Europe. Students learn about maps and the locations of countries and physical features, as they acquire appreciation for and understanding of diverse cultures. Many topics of Citizenship, including the study of different types of governments such as constitutional monarchies, republics, parliamentary democracies and dictatorships, are explored in context while learning about other counties. Citizenship also covers the foundations of government, and the fundamentals of the American constitution and political system. The goal of both Citizenship and Geography is to help make students better citizens of our country and our world, and as much as possible, these two subjects are integrated in the 7th grade Social Studies curriculum. (1 credit)

**World History to 1500 CE** (Grade 8) - Examines the human experience from its origins until the 16th century. This includes the study of the early Egypt, Mesopotamia, India, China, and Europe, as well as the classical civilizations of Greece and Rome. It follows the major cultures of Europe, Africa and Asia as they developed in the Middle Ages. Students grow in their appreciation for diverse cultures as they learn about the political developments, religions, ideologies, artistic achievements and daily life of the people of ancient and medieval times. (1 credit)

**World History to Present** (Grade 9) - Begins with BIG History, an interdisciplinary exploration of the known world that trains students to develop three essential skills: thinking across scale, integrating multiple disciplines, and making and testing claims. Students use these skills as they transition into a focus on World History in the Modern Era, from the Renaissance and the Reformation to the periods of Absolutism and Enlightenment, the American, French and Industrial Revolutions, Nationalism, Imperialism, the World Wars, the Cold War and more. The course emphasizes reading, writing, and research, incorporating both orthodox and non-traditional activities for learning. (1 credit)

Advanced Studies in U.S. History I (Grade 10) - Begins with the Age of Exploration and the Native American cultures. This course examines many cultural influences and ideologies that created a uniquely "American" culture, with attention to the geographical, cultural, political, economic, religious and artistic movements that shaped American society. The major periods addressed are: The Colonial Period; the Revolutionary Age and the Constitution; the Federalist era; the Jeffersonian/Jacksonian Eras; Manifest Destiny; the causes and effects of the American Civil War; and Reconstruction. Instruction includes individual and group research, debate, presentation, and the employment of current technology such as interactive digital video software and Internet sources to provide students with extensive opportunities to explore and analyze historical topics and interpretations. Particular emphasis is placed on the development of writing skills and the use of primary documents to develop analytical skills. (1 credit)

Advanced Studies in U.S. History II (Grade 11) - Covers the events and people of the more recent past beginning with the post-Reconstruction U.S. and its shift into a more industrialized society. The course

continues through the twentieth century to the present in a chronological study of major events, issues, movements, and leaders of the U.S. This is a college preparatory course and involves extensive lecture, supplemented by group work, DVD and video film experiences, primary source readings and instructional methods to facilitate students' pursuit of knowledge about the United States. (1 credit)

*Economics* (Grade 12) – A one-semester course that studies the basic principles of a capitalist economic system. Topics studied include: scarcity, the nature of economic systems, opportunity costs and production possibilities, supply, demand and price concepts, the nature of factor markets, efficiency, equity, the role of government, gross national product, inflation, unemployment, money and banking, and monetary policy. (.5 credit)

**AP Macroeconomics** (Grade 12) - Provides students with a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, as well as develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. (\*Students must meet pre-requisite requirements) (.5 credit)

**United States Government** (Grade 12) - A one-semester course which examines, in depth, the constitutional powers delegated to the three branches of federal government as well as those powers reserved to the states. Particular attention is also given to individual civil rights as well as the responsibilities of citizenship. Other topics included in this course are: comparative political systems, a review of the foundations of the United States governmental system, the rise and importance of political parties, and politics in a democratic government. (.5 credit)

**AP US Government** (Grade 12) - Provides an analytical perspective of government and politics in the U.S. with emphasis on the major formal and informal institutional arrangements of power. Students who complete this course may sit for the AP exam. (\*Students must meet pre-requisite requirements) (.5 credit)

\*To qualify for these AP courses, students must have earned an 85 or above in both ASUSH I and II and must not have failed a semester exam in either ASUSH I or II

## **Required Social Studies Course Sequence for All Students**

- **7**<sup>th</sup> **Grade** Citizenship and Geography
- 8<sup>th</sup> Grade World History to 1500 CE
- 9<sup>th</sup> Grade World History to Present
- 10<sup>th</sup> Grade Advanced Studies in United States History I
- 11<sup>th</sup> Grade Advanced Studies in United States History II
- 12<sup>th</sup> Grade Economics/US Government or AP Macro Economics/AP US Government

## World Languages

## The ASFA World Language Department offers French, Latin<sup>\*</sup> and Spanish. Two (2) consecutive credits of any one language are required.<sup>\*\*</sup>

Language I (Grades 9-11) - Designed for beginning students or students with little exposure to the language in a formal setting. This course introduces students to the language, history, geography, and practice of the target culture. Students will begin to develop basic skills in listening, speaking, reading, and writing. The course goals include developing functional knowledge of basic elements of language, vocabulary, and structure; and initial acquisition of listening, reading, and speaking skills. Cultural awareness is fostered through the study of various aspects of life in the world where the target language is spoken. Students will begin to develop the knowledge and skills to understand their own language and culture better, develop insight into cultures other than their own, and participate more fully in the global community. Prerequisite—9<sup>th</sup> Grade level (8<sup>th</sup> graders may take for high school credit providing Language II is taken the subsequent year, individual student schedules and faculty resources are able to accommodate, and the subject teacher approves.) (1 credit)

**Language II** (Grades 9-12) - Expands on goals of Language I, includes progression in oral and written communication, in-depth culture study, introduction to literature, and building upon the connections they make with other disciplines, the community, and the world. Prerequisite—Language I (1 credit)

Language III (Grades 10-12) - Focuses on continuing the development of communicative competence in the target language and on building a deeper understanding of the cultures of those who speak the language. Students are able to use basic language structures with an increased level of accuracy and recombine learned material to express their thoughts. Includes a study of the more complex features of the language and a broader examination of literature and history. The primary goal of this course is for students to approach the intermediate level of language acquisition. Prerequisite—Language II (course available as resources permit) (1 credit)

Language IV (Grades 11-12) - Requires students to study complex features of the language and to comprehend more abstract concepts. Students are introduced to a wide variety of texts that employ a greater variety of language as well as cultural references and figures of speech. They are able to understand materials presented on a variety of topics related to contemporary events and issues in the target cultures. Successful students will have strong command of vocabulary and structure, and will express ideas proficiently. Prerequisite—Language III and teacher recommendation/approval (course available as resources permit) (1 credit)

\* Latin I and II currently offered on alternating year basis

\*\* As upper level courses are only offered as resources permit, there is no guarantee that a Language III and/or IV will be available as to fulfill the 2 consecutive-years requirement

## **Mathematics & Sciences**

## **Mathematics**

**Math 7 -** Areas of focus will be developing an understanding of and applying proportional relationships, such as ratios and proportions, percent problems (including those involving discounts, interest, taxes, tips, percent increase or decrease), scale drawings, unit rates and slope. Students will also develop an understanding of operations with rational numbers and work with expressions and linear equations, solve problems involving scale drawings and informal geometric construction, area, surface area, and volume. Students will learn how to draw inferences about populations based on samples and about the importance of representative samples for drawing inferences.

**Math 8** - Areas of focus will be on constructing and reasoning about expressions and equations, including modeling with a linear equation, and solving linear equations and systems of linear equations. Students will use linear equations, systems of linear equations, linear functions, and their understanding of slope of a line to analyze situations and solve problems. Students will also learn to describe the concept of a function and use functions to interpret quantitative relationships. Students will analyze two- and three-dimensional figures and understand and apply the Pythagorean Theorem to find distances between points on the coordinate plane, to find lengths, and to analyze polygons.

**Geometry with Data Analysis** (Grade 9) - Students will incorporate knowledge and skills in Geometry and Measurement, Algebra and Functions, and Data Analysis, Statistics, and Probability, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. Students will build on and deepen prior understanding of transformations, congruence, similarity, and coordinate geometry concepts. Informal explorations of transformations provide a foundation for more formal considerations of congruence and similarity, including development of criteria for triangle congruence and similarity. An emphasis on reasoning and proof throughout the content area promotes exploration, conjecture testing, and informal and formal justification. A focus on mathematical modeling and real-world statistical problem-solving is included across the course. (1 credit)

Algebra I with Probability (Grade 10) - Builds upon algebraic concepts studied in Grade 7 and Grade 8 Mathematics. This course provides experiences for students to see how mathematics can be used systematically to represent patterns and relationships among numbers and other objects, analyze change, and model everyday events and problems of life and society. Emphasis is placed on functions including linear, absolute value, quadratic, and exponential; and functions as explicit (relation between input and output) and recursive (relation between successive values). The graphs of these functions and their transformations will also be explored. A focus on mathematical modeling and real-world statistical problem-solving is included across the course. (1 credit, prerequisite: Geometry with Data Analysis)

**Algebra II with Statistics** (Grades 10 or 11) - Builds on the students' experiences in previous mathematics in Geometry with Data Analysis and Algebra I with Probability. Students will explore an expanded range of functions, including polynomial, trigonometric (specifically sine and cosine), logarithmic, reciprocal, radical, and general piecewise functions. Students will solve equations associated with these classes of functions. Students will learn how to make inferences about a population from a random sample drawn from the population and how to analyze cause-and-effect by conducting randomized experiments. Students are also introduced to the study of matrices. A focus on mathematical modeling and real-world statistical problem-solving is included across the course. (1 credit, prerequisite: Geometry with Data Analysis)

**Precalculus** (Grades 11 or 12) - A college preparatory course that the advanced student takes after completing Algebra 2 with Statistics. It weaves together previous studies of algebra, geometry, and mathematical functions into a preparatory course for calculus. The course focuses on mastery of critical skills and exposure to new skills necessary for success in subsequent college level math courses. (1 credit, prerequisites: Algebra II with Statistics and teacher recommendation)

**AP Calculus AB** (Grade 11 or 12) - A college level course recommended for students interested in pursuing a college major like engineering, social or biological sciences. This course is structured around three big ideas: limits, derivatives and integrals with the Fundamental of Calculus. The course goal is to develop students' understanding of the concepts of calculus and provide them with methods and applications. This course also emphasizes a multi-representational approach with concepts, results and problems expressed graphically, numerically, analytically, and verbally. The Advanced Placement exam is optional for students at end of the class. (1 credit, prerequisite: Precalculus)

**Financial Algebra** (Grade 11 or 12) - A post-Algebra II course designed to introduce upperclassmen to calculations and decisions made over the course of their lifetime. An emphasis is placed on logical thinking and informed decision making. Topics will include paying for college, creating a balanced monthly budget, personal income taxes, and the mathematics of interest, loans, insurance, and more. (1 credit, prerequisite: Algebra II)

AP Computer Science Principles (Grade 11 or 12) - Designed to introduce students to the central ideas of computing and computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing and computer science change the world. The course is challenging and rich in computational content, includes computational and critical thinking and skills, and engages students in the creative aspects of the field. The key concepts and related content are organized around seven big ideas involving six computational thinking processes. In this course, each of the big ideas (Creativity, Abstraction, Data and Information, Algorithms, Programming, the Internet, Global Impact) is taught in conjunction with one or more of computational thinking practices (Connecting Computing, Creating Computational Artifacts, Abstracting, Analyzing Problems and Artifacts, Communicating, Collaborating). Essential questions that students will explore are posed for each of the big ideas. These ideas connect students to a curriculum scope that includes programming but is not programming focused. Additionally, students will have opportunities to build their writing skills through portfolios, journals and technical writing. Weekly journal entries reflecting on learning and explaining the technical aspects of what has been learned are required for each student. (1 credit, prerequisite: Algebra II)

## Required Math Course Sequence for All Students

**7**<sup>th</sup> **Grade –** Math 7

- 8<sup>th</sup> Grade Math 8 or Algebra I with Probability
- 9<sup>th</sup> Grade Geometry with Data Analysis
- 10<sup>th</sup> Grade Algebra I with Probability or Algebra II with Statistics
- 11<sup>th</sup> Grade Algebra II with Statistics or Precalculus or Financial Algebra or APCSP

## Sciences

**Science 7** (Grade 7) - This course is an introduction to the many fields of life science. Emphasis given to characteristics of life, biological theory, cellular structure & function, evolution, genetics, ecology, classification and human body systems. Includes frog & earthworm dissection.

**Science 8** (Grade 8) - This lab-based course emphasizes the theories of the physical world and provides a firm foundation for upper level choices. Students are introduced to basic principles of chemistry and physics, along with the scientific process and science literacy.

**Biology** (Grade 9) - This comprehensive course studies all aspects of living things including lab techniques like microscopy, staining techniques, dissection, classification, and genetic analysis. Emphasis given to biological molecules, cellular structures, cellular energy, cellular reproduction, genetics, evolution, classification, ecology, biodiversity and vertebrate anatomy. Includes fetal pig dissection. (1 credit)

Advanced Chemistry (Grade 10) - This year long, lab-based course focuses on the theoretical principles behind basic inorganic chemical concepts. Topics range from the periodic table, atomic theory, stoichiometry, acid/base interactions, chemical reactions, and intros to organic and biochemistry. Mathematically based, students must be able to perform algebraic operations and independently solve word problems. (1 credit, strongly recommend current enrollment in or completion of Algebra II)

**Chemistry** (Grade 10) - This year-long, lab-based course encompasses the study of chemistry through the nature of foods - including the causes of deterioration, the principles underlying food processing and the improvement of foods for the consuming public. Students will understand chemical aspects through food composition and cooking, giving emphasis to the functional properties and the chemical reactions of major components of foods: carbohydrates, lipids, proteins, and water. The class also provides a look into food microbiology, which encompasses issues of food safety, food preservation, and food production. Students with severe food allergies need to be aware. (1 credit)

## Science electives are available to all students in grades 11 and 12. Some electives are open to 10<sup>th</sup> graders who score a 90 or above for both semesters of Biology.

**Astronomy** (Grade 11 or 12) - This is a full-year upper-level class where students will learn the structure of our solar system and universe, as well as the natural laws that govern both. First semester focuses on solar system astronomy, while second semester focuses on stellar astronomy and cosmology (origin and evolution of the universe), as well as some quantum topics such as time travel. This lab-oriented course includes high level expectations in scientific observation, investigation, experimental design, data interpretation, problem-solving, critical thinking and analysis of scientific literature.

**Human Anatomy and Physiology** (Grade 11 or 12) - This intensive, lab-based course students will get a comprehensive view of the structure and function of the human body. Emphasis is given to anatomical terminology, histology, structure and function of human body systems, diagnostics testing, and diagnosis of disease. Multiple dissections <u>required</u> including feline or fetal pig dissection. (1 credit)

AP Environmental Science (Grade 11 or 12) - This course is an interdisciplinary course that encompasses

natural sciences, 38 applied environmental science and social science. APES offers students a chance to understand both basic ecology and modern environmental issues. APES stresses rigorous scientific principles, inquiry-based labs, quantitative analysis and articulation of student understanding through writing. This yearlong course meets for 45 minutes each day, and 3 hours of homework per week is expected. (1 credit, prerequisites: Biology and Chemistry and current enrollment in or completion of Algebra II)

**Forensic Science** (Grade 11 or 12) - This advanced level course exposes students to the use of science to solve crimes. Students will study famous cases as well as perform similar lab techniques executed in crime labs across the country. Topical discussions make this class unique every year. (1 credit)

**Marine Biology** (Grade 11 or 12) - This course focuses on marine ecology, human impacts and conservation in a project-based format. The course is designed to facilitate student understanding of oceans and the interactions between humans and the marine environment. Students are expected to work together to explore the functioning of marine ecosystems and the issues which threaten them. (1 credit)

*Physics* (Grade 11 or 12) - The purpose of this course is to prepare students for college physics. This course provides an understanding of the basic principles involved with physical concepts and the ability to apply these principles in the solution of problems. The course content includes topics in mechanics, kinetic theory, electricity, waves and optics, and modern physics. Laboratory work and problem solving are main learning processes. (1 credit, prerequisite: current enrollment in or completion of Algebra II)

## Required Science Course Sequence for All Students

7<sup>th</sup> Grade – Science 7 8<sup>th</sup> Grade – Science 8 9<sup>th</sup> Grade – Biology 10<sup>th</sup> Grade – Chemistry or Advanced Chemistry 11<sup>th</sup> Grade & 12<sup>th</sup> Grade –Astronomy/Forensic Science (offered on alternating years) or AP Environmental Science (APES) or Human Anatomy and Physiology/Marine Biology (offered on alternating years) or Physics

## **Computer Science**

**Computer Applications** (Grade 8) - An introduction to using the basic Google applications (word processing, presentation software, spreadsheets, internet usage, email). Students learn about computers – history, hardware and software. An introduction to emerging computer applications is also included. (.5 credit, required for all 8<sup>th</sup> graders)

AP Computer Science Principles (Grade 11 or 12) - Designed to introduce students to the central ideas of computing and computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing and computer science change the world. The course is challenging and rich in computational content, includes computational and critical thinking and skills, and engages students in the creative aspects of the field. The key concepts and related content are organized around seven big ideas involving six computational thinking processes. In this course, each of the big ideas (Creativity, Abstraction, Data and Information, Algorithms, Programming, the Internet, Global Impact) is taught in conjunction with one or more of computational thinking

practices (Connecting Computing, Creating Computational Artifacts, Abstracting, Analyzing Problems and Artifacts, Communicating, Collaborating). Essential questions that students will explore are posed for each of the big ideas. These ideas connect students to a curriculum scope that includes programming but is not programming focused. Additionally, students will have opportunities to build their writing skills through portfolios, journals and technical writing. Weekly journal entries reflecting on learning and explaining the technical aspects of what has been learned are required for each student. (1 credit, prerequisite: Algebra II)

## Health & Wellness

Our Health and Wellness program starts and ends with student experience and action. Our primary philosophy is one centered on the idea that health and physical education are not stand-alone classes, rather, a series of experiences and actions that ideally continue well after graduation. Health and Wellness (HW) are woven into the ASFA experience knowing that personal HW is action-based. One must act in order to take care of oneself. We hope to inspire and practice healthy habits that stay with students for life.

There are a number of specific ways in which we deliver our HW curriculum. We also address real time HW needs on an ongoing basis through events, speakers, displays, and meetings. Some of the specific and consistent ways in which we deliver HW curriculum are as follows:

- 7<sup>th</sup> Grade Health and Wellness class
- 8<sup>th</sup> Grade Health and Wellness class (1 semester)
- Grade level retreats
- Make A Difference Day
- Get Active Day
- S.T.A.R. class (Study, utilize Technology, Activity, Research)
- Sexual Health (outside expert in human sexual health, grades 8, 10, 12) series
- Elective classes such as Nutrition, Agriculture Science, etc.
- Fun events such as Fall Carnival, Costume Contest, Coffee House, Dances

**7**<sup>th</sup> **Grade Health and Wellness Class -** Centers on building a strong community through experience-based activities and initiatives coupled with regular exercise.

**8**<sup>th</sup> **Grade Health and Wellness Class -** Continues with a focus on building community coupled with regular exercise. We also dig a little deeper into how groups function, diversity and how to cope with all that adolescence brings.

Grade Level Retreats - Retreats for each grade are age appropriate and have specific themes.

- 7<sup>th</sup> Grade Orientation (before first day of school)
- 8<sup>th</sup> Grade Adventure Day
- 9<sup>th</sup> Grade Rites of Passage retreat
- 10<sup>th</sup> Grade Perseverance retreat
- 11<sup>th</sup> Grade Leadership retreat

• 12<sup>th</sup> Grade Transition retreat

**Get Active at ASFA Day -** A time for students to choose from a myriad of opportunities to get active. We invite outside professionals to expose our students to activities they could pursue as lifelong healthy habits. Examples of past activities include, but are not limited to:

- Rock climbing wall
- Ballroom Dance
- · Archery
- Yoga
- Martial Arts
- Horseback Riding
- Zumba
- $\cdot$  ...and much more

**Make A Difference Day (MAD Day)** – An annual full day volunteer event to provide service to our greater community. Projects are set up with numerous outside agencies and provide students with an opportunity to accomplish the following:

- Increase awareness of one's community
- Improve interpersonal skills in a unique setting
- Broaden perspectives of diversity issues
- Enhance critical thinking skills
- Develop civic responsibility through active community involvement
- Develop stronger sense of school community and belonging
- To find connections to school curriculum
- Strengthen student connections to faculty and staff outside the classroom and vice versa
- To explore health benefits of volunteerism
- To have fun and relieve stress
- To enhance brain activity through physical activity

**STAR** (Grades 9-12) - An acronym for <u>S</u>tudy hall, <u>T</u>echnology access in the Computer Lab and the Library, physical <u>A</u>ctivity and recreation, or <u>R</u>esearch/rehearsal in the specialty. Through a supervised accountability system, students are able to choose what activity best meets their needs from day to day. STAR periods allow students the opportunity to engage in activities that help to meet their state required Health and Wellness units and also give students the flexibility to prioritize the use of their time. This freedom helps students develop healthy patterns of time management. To maintain STAR privileges, students must respect the flexibility afforded them. (No credit awarded)

**Sexual Health Education -** Delivered primarily through a comprehensive series for grades 8, 10 and 12. Our goal is to provide students with objective knowledge, and interpersonal skills related to sexual health that will be of practical value in their everyday lives and also contribute to fostering the best possible learning environment on the ASFA campus. It is our belief that sexual health is vital to our overall health.

**Social and Emotional Learning (SEL)** (Grades 7-8) - An educational process through which students develop skills related to self-awareness, self-management, social awareness, relationships, and responsible decision-making.

## The Fine Art Electives

These courses are taught by specialty faculty, and most are available to all students. Arts students far exceed all state fine arts course requirements in their majors. Fine Arts students **must earn** at least 0.5 fine arts course credits from a department other than their own as a graduation requirement. Math/Science students **must earn** at least 1.5 fine arts course credits as a graduation requirement. Math/Science students are **strongly urged** to take some fine arts credits during their 9<sup>th</sup> and 10<sup>th</sup> grade years to avoid scheduling difficulties in 11<sup>th</sup> and 12<sup>th</sup> grades. Fine arts credits may be satisfied from among these offerings:

Acting for Non-Majors (Grades 9-12) - Build confidence, empathy, and interpersonal skills through acting. In this class, you will learn to use your mind, body, and voice to communicate effectively and clearly based on a script and your character analysis. The semester will culminate in a class performance for your peers. (0.5 credit)

Art Dimensions (Grades 9-12) - A one semester Visual Arts studio course for non-majors with an emphasis on structure and volume through 3-D design. (0.5 credit)

**Art Fundamentals** (Grades 9-12) - This class is designed as an introduction to some of the fundamental elements of art and design. As a studio course, the assignments will be mostly hands on; the students will learn how to use SHAPE, VALUE, TEXTURE, COLOR, LINE and FORM together with SPACE, SCALE, BALANCE, UNITY, RHYTHM, MOVEMENT and EMPHASIS in individual art assignments. These assignments are mainly 2D and cultivate expression, criticality, looking, and interpretation. Additionally, students will gain experience with a variety of art materials and techniques. (0.5 credit)

**Digital Filmmaking I** (Grades 9-12) – Digital Filmmaking I is a semester-long class designed to help students develop a foundational familiarity and facility with audio/visual tools and equipment. This hands-on, project-based class will immerse students in the fundamental principles of videography, lighting, and sound recording/design. Projects will include (but aren't limited to) creating music videos, ads and promotional videos, vlogs, and short films, both scripted and documentary. (0.5 credit)

**Digital Filmmaking II** (Grades 9-12) – Digital Filmmaking II is a semester-long class intended to extend the foundations established in Digital Filmmaking I. The focus is collaborating with other students in the class to create longer, more complex short films, scripted, experimental, and/or documentary. Pre-requisite: Digital Filmmaking I or permission of the Media Arts Coordinator. (0.5 credit)

**History of Film** (Grades 11-12) - Takes a critical look at the art of film through the 20<sup>th</sup> century. Students will learn about and how to evaluate a film based on its elements of style (mise en scene, cinematography, editing, sound) and form (genre and structure). 1<sup>st</sup> Semester: 1890s – 1960s, 2<sup>nd</sup> Semester: 1960s – present. (1 credit)

**Interdisciplinary Media Arts** (Grades 9-12) – Interdisciplinary Media Arts is a semester-long class that is collaborative, project-based, and process-oriented. It speaks to the role of various forms of media in all our specialty disciplines. The course is team-taught and curated by faculty from across the various specialty and academic disciplines. It will help students from all specialties develop their skills using various digital and analog (non-digital) media tools, with special emphasis on applications in the Adobe Creative Cloud. It will also ask students to interrogate the ethics and aesthetics of digital (and collaborative) art forms while helping them become adept at manipulating sound, text, and images to create and collaborate on media arts projects designed to inform, inspire, and entertain. (0.5 credit)

Introduction to Bookmaking (Grades 9-12) – Students will be introduced to a variety of functional and

aesthetic book and box binding structures and techniques. Students will respond to demonstrations with their own creations throughout the semester and are encouraged to experiment with tools and methods they learn in class. There will be opportunity for analogue and digital formatting for books with content as well as possible papermaking experience. (0.5 credit)

Introduction to Creative Writing (Grades 9-12) – An introductory course for non-majors interested in poetry, creative nonfiction, and fiction writing. Students learn the basic elements of each genre via readings of published works in each genre, lectures by the instructor, and class discussions. On a regular basis, participants submit original work for critique by fellow students. Also, they complete a collection of revised writings to be turned in as a project at the end of each semester. (0.5 credit)

Introduction to Movement and Dance (Grades 9-12) – A basic but enriching class for any skill level or experience in dance. It is a hands-on and interactive way of learning movement and awareness of the body. This class provides a behind-the-scenes look and interaction with dance. In this class you will experience ballet and modern technique, dance history from its ancient beginnings to present day, mime, yoga, improvisation and improve coordination. Besides moving, this class will use books and videos for instruction. Through Zoom you will interact with industry professionals and have opportunities to see dance performances in the community. This experience will give you a wider dance skill set, as well as a greater appreciation and understanding of dance. (0.5 credit)

**Multimedia Narrative Journalism II** (Grades 9-12) – Formerly known as "Creative Media", this is a year-long production-based class that may be repeated. Students in this class staff and produce content for *The Star*, ASFA's multimedia journalism platform. Pre-requisite: Multimedia Narrative Journalism or permission of the Media Arts Coordinator. (1 credit)

**Tech Theatre** (Grades 9-12) - Non-majors course introduces students to technical theatre fundamentals including lighting, scenery construction and sound. Hands on activities may include scenery construction, hanging/focusing lights, equipment and space maintenance, safe working practices and preparation for the events of various departments. Students may also have the option to serve as a member of the crew for ASFA school productions that take place over the course of the semester if their schedule allows. (0.5 credit)

**Writing for Television and Film** (Grades 9-12) – Students will not only learn the conventions of writing scripts for television and film, they will immerse themselves in the fundamentals of good storytelling. Students will write both collaboratively and autonomously, and they will read and respond to their peers' work in a workshop setting. We will also read exemplary professional screenplays and watch/analyze various exemplary films. (0.5 credit)

## Other Electives, Curricular Programs & Assigned Courses

*Agriscience* (Grades 9-12) - Agriscience is an interdisciplinary course of biology, chemistry, earth science and human nutrition taught through activities in the classroom, in the garden, in the lab, and in the kitchen. The course begins with the formation of land, soil, the atmosphere and the evolution of plants. An intensive botany study follows, detailing plant morphology and function, collection, and phylogenetic classification. Throughout the course, students plan, plant, and tend a garden on the school grounds, harvest plants, and cook and eat plants from the garden. (Pass/Fail course, 1 credit)

**AP Psychology** (Grade 11 or 12) - 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. (1 credit)

**Communication Arts** (Grades 9-12) - This semester-long course will cover a range of topics in communication that will prepare students for a number of real-world communications situations that they will face once they leave ASFA. It will be separated into three six-week units:

-The Interpersonal: emails, interviews, grant writing

-Group Conversations: public speech and debate

-Broad Audience Outreach: Adapting research for a general audience

As the target audience of each unit grows, these units will build on each other and culminate in a final project designed to incorporate creative elements into a general-interest multimedia project (think an episode of *Radiolab*, an article for *Wired*, or a YouTube video in the style of Steve Mould). (0.5 credit)

**Fantasy Literature** (Grades 9-12) - We may think we understand the fantasy genre on a surface level, but how did it begin? Is it "the oldest form of storytelling" like we see in *The Odyssey*, the *Epic of Gilgamesh*, ancient Egypt, or in medieval texts like *Beowulf*? How does the hero's journey relate to the fantasy tale? Was Tolkien breaking ground or did he merely add to an existing tradition? Where does fantasy literature fit in relation to other genres like science fiction, horror, fairy tales, or magical realism? How did women and writers of color find their place within the genre, and how do their voices add to the cacophony? What does the current fantasy landscape look like, and how much do writers like J. K. Rowling and Rick Riordan owe to the fantasy literary heritage? How do tabletop role playing games (RPG) and video games extend the genre to interactive/ "choose your own adventure" fiction? Possible authors could include: Homer, Gilgamesh, Beowulf, Tolkien, C.S. Lewis, Carl Jung, Joseph Campbell, Ursula K. Le Guin, Neil Gaiman, Nnedi Okorafor, J.K Rowling, Rick Riordan, Susanna Clarke, William Shakespeare. Students will read, discuss, create projects, watch films, and play a tabletop RPG like *Dungeons & Dragons* to create a simple campaign/story. (0.5 credit)

**Introduction to Artificial Intelligence** (Grades 10-12) – Pre-req: APCSP. In this one-semester course, students will be introduced to the breadth of the artificial intelligence field through the development of projects employing varied AI approaches, such as machine learning. We will also be discussing societal and ethical issues involving AI. The course expects students to understand the fundamentals of programming. (0.5 credit)

Introduction to Cybersecurity (Grades 10-12) – Pre-req: APCSP. In this one-semester course, students will learn various topics related to Cybersecurity. The topics covered include: ethics and security, classic and modern cryptography, malicious software, and physical and web security. Prior knowledge of coding is required. (0.5 credit)

**Introduction to Engineering I** (Grade 9-12) – A high school level one-semester course designed for student who are interested in engineering. The main focus of this course is to provide exposure to various fields of engineering (mechanical, civil, aerospace, and electrical) as well as design process, teamwork, communication, and technical documentation through project-based learning. In addition, students will use both 3D modeling and circuit design software to help them design solutions to proposed problems. (0.5 credit)

**Introduction to Engineering II** (Grade 9-12) – A high school level one-semester course in which students work in teams to develop a unique solution to a real-world problem. Students will apply the skills accumulated in *Introduction to Engineering I* as well as potentially all of their previous courses. Student teams will submit frequent written documentation of their project progress and will give formal presentations of their work at both the midterm and end of semester. (0.5 credit)

**Introduction to Neuroscience** (Grades 10-12) – This semester-long course will examine the structure and function of the nervous system of humans and other animals. Students will explore how brains collect, process and act upon information as it is essential to the understanding of ourselves and the world. (0.5 credit)

Intro to Research Methodology and Robotics (Grades 7-8 Math/Science) – This course will be a yearlong course for our middle school Math and Science students. They will delve into the exciting world of coding and construction using VEX IQ, honing their skills and creativity in building and programming. Moreover, participants will have the thrilling opportunity to showcase their talents in a series of VEX competitions held across the state, putting their acquired knowledge and abilities to the test in exhilarating challenges.

In the second segment of this comprehensive course, students will unlock the secrets of effective research methodologies. From crafting hypotheses to articulating claims and predictions, they will master the art of formal research, equipping themselves with invaluable skills for academic and real-world pursuits. Additionally, they will refine their ability to articulate findings through comprehensive reports, ensuring they are well-prepared for future scholarly endeavors. (No credit awarded)

**Make It with Computing** (Grades 10-12) – This is a semester-long course for any student who is interested in learning the creative side of Computer Science. The goal is to introduce them to the creative application of computer science by keeping the topics fun and engaging. This will be a project-based course where students will be working with partners or in groups. During the semester students will learn 3D graphic design using Blender and will get introduced to Adobe Animate. This course can be taken by students grade 10 or higher from any department, and no prior coding knowledge is required for it. (0.5 credit)

**Science Fiction Literature** (Grades 9-12) - This course is designed to increase students' familiarity with the genre of Science Fiction. We will read novels and short stories that depict our future world, scientific discoveries and visions, and conflicts between humans, aliens, and sentient technology. With science fiction as our guide, topics will include: history of science fiction, dystopian vs. utopian fiction, AI, and other science related discoveries as it relates to humanity, society, past, and future. Our reading list may include such writers as Ray Bradbury, Isaac Asimov, Robert Heinlein, Ursula K. Le Guin, Douglas Adams, HP Lovecraft, Philip K. Dick, and others. The semester will conclude with a campaign in a science fiction tabletop role playing game. (0.5 credit)

The Holocaust, Genocide, and Modern Humanity (Grades 9-12) - This course will introduce the history of the European Holocaust and address the wider questions of genocide in the modern world. Students will examine these events in comparative context (including such events as Armenian, Stalinist, and Cambodian massacres and the Rwandan and Darfur genocides) and discuss their impact on modern cultural, political, intellectual developments. Students will explore some of the greatest moral and ethical dilemmas in modern history to examine the notion of humanity. How does an understanding of the origins and virulence of genocide challenge societies to be more tolerant, pluralistic, and open? This is an interdisciplinary course drawing from history and the humanities, the social sciences, and education. (0.5 credit)

**Yearbook** (Grades 9-12) - Designed to teach the skills necessary to produce the school yearbook, offering a complete record of an entire school year. The year begins by planning the coverage for the school year and designing a unifying theme for the book. Students will study layout and design, writing and editing copy, headlines, and picture captions. This course provides the study of and practice in gathering and analyzing information, interviewing, note taking and photography. Students will learn strategies of planning, producing, and distribution of the yearbook. Students will learn proofing strategies and work independently as photographers. Students must produce quality work, work together in groups, handle deadline pressure, and expect to spend additional time outside of the class working on the publication. The class is designed to develop leadership and design skills, accuracy and accountability. (1 credit)

*Library & Information Science* (Grades 9-12) - Students will learn, through hands-on experiences at the circulation desk, the basics of daily library operations, research strategies, online content application, and philanthropy. Basic instruction will include lessons on using the Dewey Decimal System, reviewing

books, utilizing hardware and software applications, gathering of proper data, and conducting monthly progress reviews. (0.5 credit)

**Drivers Education** (Grade 10-12) - Teaches the fundamental rules of the road for safe and responsible driving and provides beginning drivers behind-the-wheel driving experience. Also includes 30 hours of classroom instruction. Learner's permit required. (0.5 credit)

**Homerooms -** Assigned to every student by grade-level, and occur simultaneously with lunch periods. Students are required to attend Homerooms every day. Many activities occur during this brief period to avoid repeated instructional interruptions in academic classrooms. A few examples of activities include daily announcements, college advising, orientation sessions, elections, and registrations. (No credit awarded)

**Study Hall** (Grades 7-9) - Successful transition into the intensive, focused expectations and requirements of ASFA is crucial to long-term success here and beyond. Study Halls are intended to allow students inschool time to remain on top of their sometimes-daunting schedule. (No credit awarded)

**STAR** (Grades 10-12) - An acronym for <u>S</u>tudy hall, <u>T</u>echnology access in the Library, physical <u>A</u>ctivity and recreation, or <u>R</u>esearch/rehearsal in the specialty. Through a supervised accountability system, students are able to choose what activity best meets their needs from day to day. STAR periods allow students the opportunity to engage in activities that help to meet their state required Health and Wellness units and also give students the flexibility to prioritize the use of their time. This freedom helps students develop healthy patterns of time management. To maintain STAR privileges, students must respect the flexibility afforded them. (No credit awarded)

**Performance Attendance** (Grades 7-12) - All students and faculty are required to attend major performances by the fine arts departments each year. (No credit awarded)



Creative Writing asfaschool.org/creative-writing

The ASFA Creative Writing department offers Alabama's best young writers an extended course of study in the literary arts that is nearly unparalleled in its rigor and scope at the scholastic level. Through continuous reading, writing, revision, and peer critiques, ASFA writers discover and develop their individual artistic voices, producing poems, stories, scripts, and essays of exceptionally high literary merit.

ASFA-CW students have received numerous awards in regional and national writing competitions, including the Alabama Writers' Forum's Literary Arts Awards, the National Foundation for Advancement in the Arts' youngARTS program, the Scholastic Art and Writing Awards, and the U.S. Presidential Scholars in the Arts program.

That said, our students do more than simply produce noteworthy work during their time here. Our ultimate goal is to help ASFA-CW students develop a sustainable writing practice that can last a lifetime. ASFA-CW alumni have also published their work widely and served in editorial roles at **The New Yorker, Cosmopolitan, Oxford American, Tin House, Gulf Stream**, and **Washington Square**. They have also received a range of notable writing-related honors, including a Rona Jaffe Award, an individual artist's fellowship from the National Endowment for the Arts, a Kundiman fellowship, a Tennessee Williams fellowship to the Sewanee Writers' Conference, and inclusion in the **Best American Poetry** and **Best New Poets** anthologies.

## **Extracurricular Activities**

**Outreach Program -** Juniors and seniors have the opportunity to work in our outreach program to Birmingham-area elementary schools. At least six times a year, our students go out into the

community to teach basic writing skills to fourth and fifth grade students in a relaxed and fun environment.

**Student Readings -** Each year, all ASFA-CW students give a public reading of their work on campus, and they submit their work for inclusion in **Cadence**.

**Contests and Publications -** Throughout the school year, all students submit the best of their works to various literary contests and literary publications. The contests range from local competitions to regional and national competitions, some of which offer substantial monetary awards. The department has a long history of success with submissions, so preparing the work for submission is a departmental priority.

## Juries and Senior Requirements

**Semester Juries -** The Semester Jury constitutes a final examination in Fiction/Poetry/Special Topics workshops. Accordingly, Semester Juries are one-fifth (20%) of the semester grade average. Semester Juries consist of revised and edited work, representing the best of what the students have produced during the semester. Workshop juries are evaluated by the individual workshop instructor in terms of literary merit, technical prowess, creativity, and overall improvement, among other expectations.

**Senior Requirements -** During the fall semester, creative writing seniors must complete a Senior Thesis Project, consisting of a substantial manuscript of poetry, fiction, non-fiction, or various combinations of all three genres.

During the spring semester, seniors host senior readings and receptions at the end of the year. Typically, two seniors will read together and coordinate to plan the reception in close supervision by the creative writing chairperson. Each senior should be prepared to read from 20 to 30 minutes worth of material that represents a wide range of the student's work. Instructors evaluate the readings in terms of preparation, work quality, and performance.

In addition, during the spring semester, each senior serves as editor on **Cadence**, ASFA's awardwinning literary anthology. The senior editors are responsible for collecting, editing, and publishing student work of literary merit from the department. Senior students set a production schedule and follow that schedule all the way to publication.

Seniors must successfully complete all projects to graduate.

## Workshops

## Introduction to Fiction Workshop | Introduction to Poetry Workshop

For 7-8th Grade Students (and New 9th Grade Students)

• Focus: Generating work in different forms and genres; reading advanced (but ageappropriate) poetry and literary fiction these students probably wouldn't read on their own; getting comfortable sharing, analyzing, and talking about peer works in progress in a supportive, encouraging environment—i.e., strong emphasis will be placed on describing the work and appreciating its strengths.

## Fiction Workshop | Poetry Workshop

(For 9-12th Grade Students)

• Focus: Generating original new work; sharing, analyzing, and talking about peer works in progress in a supportive, constructively critical environment. Readings will augment/amplify concepts addressed in workshop; outside reading load should be kept relatively low—i.e., generally speaking, packets of exemplary individual poems, short stories, and/or craft essays that can be read in a single sitting.

## **Forms Courses**

## Forms of Fiction | Forms of Poetry (Prosody) | Forms of Creative Nonfiction

(For 9-10th Grade Students and New 11th Grade Students)

• Focus: Reading and analyzing a range of primarily contemporary (late 20th C. to present) literature within a given genre in order to give younger high school students a more extensive background and vocabulary in literary writing. Students will generate a fair amount of critical/analytical writing in response to course readings as they also create new work modeled after the course texts and in response to course concepts. This is not a workshop; students will not be required to regularly critique peer works in progress for Forms courses. The emphasis will instead be on exposing students to new texts, authors, and concepts, and for students to think critically about the material and to experiment with using course materials as new models for their own work without too much concern for how those experiments will be received by an audience.

## Practicums

ASFA-CW Practicums are project-based courses designed to give upper-level ASFA-CW students (11-12th Grade) the opportunity to make practical application of what they have learned in our program. Equal parts seminar, independent study, and internship, these courses require students to take responsibility for their own creative process while also working side-by-side (and sometimes in collaboration with) other students.

## Practicum I

• Focus: "Authorship" and the individual writer's life, with special attention on helping students plan for and begin to develop an autonomous writing life that can last beyond their time at ASFA. Topics for discussion will include the pros and cons of submitting work for contests and publication; a general overview of the "business" of writing; exploring different publication venues and contest opportunities; and striking the proper balance between nurturing a healthy, sustainable writing process and publishing and promoting finished work. There is also a college advising component to this course, with an eye toward preparing students for their continued study of writing at the collegiate level (and beyond). Finally, students in this course are expected to make progress on an extended chapbook-length (or longer) project that will (or could) serve as their senior thesis, and

therefore the group will periodically discuss the challenges/discoveries inherent in that process.

## Practicum II

• Focus: The writer's role in creative communities and the world at large, with special attention to literary editing and arts advocacy. Against a backdrop of course texts/materials that provoke thought about the role of the arts/artists in society, students will produce the award-winning ASFA-CW literary magazine, *Cadence;* curate the department's annual 3-D Poetry Exhibit; and develop content for the <u>ASFA-CW blog</u>. They will also coordinate and implement an annual fundraising event for the department and plan a literary-arts based outreach activity for the following year's ASFA MAD Day.

## OTHER REQUIREMENTS

Each year, all ASFA-CW students give a public reading of their work on campus, and they submit their work for inclusion in *Cadence*. Students are also required to submit and defend a thesis of original creative work during their senior year.



# Dance

## asfaschool.org/dance

The ASFA Dance Department curriculum is currently grounded in the philosophy of the Revolutionary Principles of Movement (RPM). RPM focuses on research-based kinesiology while emphasizing the inherent joy of movement and self-expression in dance. Multiple dance forms, repertoire and somatic practice round out the class offerings and a registered physical therapist and nutritionist are on staff. Juniors and seniors take a professional dance practicum which includes dance history, composition, a broad survey of the field investigating career and higher education opportunities, and essential elements of production. Senior year culminates in a unique student-created and choreographed performance. Learn more at <u>https://rpm.dance</u>

## Value Statement (updated Fall 2023)

The ASFA Dance Department is a pre-professional training program reflective of the 21st century and the call for a more open learning environment. Rooted in research-based kinesiology, the

curriculum is grounded in the philosophy of the Revolutionary Principles of Movement (RPM). RPM's inclusive nature creates an empowering setting that amplifies individual voices to become kinetically aware movers and critically thinking dance artists.

## **Dance Faculty**

Wes Chapman, ASFA Dance Chair, ASFA alum, former artistic director of Alabama Ballet, former American Ballet Theatre principal dancer and director of ABT II

**Margi Cole**, ASFA dance faculty, ASFA alum, artistic director, choreographer, dancer, educator, and founder of The Dance COLEctive

**Germaul Barnes**, ASFA dance faculty, BESSIE award-winning répétiteur for the Bill T. Jones/Arnie Zane Company and artistic director of Viewsic Dance, artistic director of Southern DanceWorks

**Shawn Black**, ASFA dance faculty, ASFA alum, extensive dance educator and former Alabama Ballet, Atlanta Ballet and American Ballet Theatre dancer, and master educator/choreographer

## **Current Courses**

**Dance Elective:** Intro to Movement and Dance is a basic but enriching class for any skill level or experience in dance. It is a hands-on and interactive way of learning movement and awareness of the body. This class provides a behind-the-scenes look and interaction with dance. In this class you will experience ballet and modern technique, dance history from its ancient beginnings to present day, mime, yoga, improvisation and improved coordination. Besides moving, this class will use books and videos for instruction. Through zoom you will interact with industry professionals and have opportunities to see dance performances in the community. This experience will give you a wider dance skill set, as well as a greater appreciation and understanding of dance.

**Modern Technique with Margi Cole:** Margi's technique class is designed to emphasize conditioning, coordination, alignment, clarity, rhythm, and artistry. All of this is best achieved through and with honest effort. Informed by her training in classical ballet, Limon, Cunningham, Graham and release-based technique, she calls this self-assembled eclectic technique the "Margi Style". Class starts on the floor and continues with exercises standing and moving across the floor. The class is designed around an infrastructure of principles that include articulation of the spine, finding the supporting leg, dropping your weight, changing direction, falling through space, and efficiently moving in and out of the floor. These ideas are then further supported by the use of mixed rhythms, strong imagery and a desire to find the spaces in between really specific forms, which is where the real "dancing" is happening. CONTACT Margi email: mcole@asfaschool.org , phone extension 2267

**Modern Contemporary Technique with Germaul Barnes:** Mr Gee's modern/contemporary dance class that introduces students to the fundamentals of the Barnes' fusion of movement styles utilizing the principles from Bill T. Jones, Milton Myers, Katherine Dunham, Ruth Anderiane and yoga practices. Dancers will focus on the ability in their relation to the floor, building power, fluidity,

balance, and speed. With an additional focus on isometric conditioning and proper alignment, the class teaches dancers how to apply energy, efficiency, and accuracy to movement while reclaiming the JOY<sup>™</sup> of dancing. The class begins with a comprehensive warm-up followed by exercises moving across the floor and finishes with combinations. CONTACT Mr. Gee email: <u>gbarnes@asfashool.org</u>, phone extension 2201.

**Ballet Technique:** Classes are based upon traditional classical ballet and supported by the principles of Ruth Petrinović's Revolutionary Principles of Movement. Age-appropriate exercises and enchaînements are designed to systematically build upon a basic understanding of the principles of ballet, firmly guiding and encouraging a student to develop the technical mastery needed for full artistic expression. Men's Technique is incorporated into these classes specifically designed to enhance the physical strength, power, and brilliance of male identifying physicality with attention to elevation, pirouettes, and batterie. Pointe skills are offered to all dancers, focusing on correct technique through an appropriate and challenging vocabulary. The dancer learns all about the pointe shoe, including its use and care, as well as how to correctly stand en pointe. Increasingly difficult exercises are designed to build the dancers' strength and agility necessary to perform the traditional classical and contemporary repertoire.

## Rehearsal

Because dance is a performing art, ASFA dance believes our "stage is the best teacher", dancers are involved in rehearsals a minimum of 6 hours a week in preparation for 3 main stage productions and numerous informal presentations throughout the year. Choreography is purposefully diversified to allow students to become familiar with various forms and styles of dance performance. Productions include works from the traditional ballet, modern repertory, and original works by resident or guest faculty. Pas De Deux/Partnering, Variations and Repertory are a valued part of the curriculum. Variations and Repertoire from a vast array of genres are taught and practiced. Dancers learn the skills to support both traditional and contemporary forms. Emphasis is placed upon the correct technique, accurate style, and appropriate interpretation of each piece of repertory.

## Jr. PDP Description

Professional Dance Practicum-PDP taught by Mr. Gee (Germaul Barnes) examines the professional dance field by introducing students to dance history, composition, stage production, optional careers in dance, and continuing education research. Topics include but are not limited to:

- Choreography Tools
- Lighting Workshop
- College/University
  - o Research
  - Advisor's
- Vision Boards
- Dance on Film
- Dance History
- Careers in the Field

- Dance Critique
- Costume Construction
- Alumni Talks
- Field Trips
- Dance Pedagogy
- Global Perspectives

## Sr. PDP Description

Professional Dance Practicum-PDP taught by Margi Cole is centered around a Senior Choreography Project. The class explores a broad range of topics related to the overall production of a new, fully produced work on the DJD stage. Other relative subject matter is explored over the course of the year. Topics include but are not limited to:

- Senior Choreography Production
- Dance Composition
- Collaboration
- Lighting Workshop
- College/University
  - o Research
  - Application support
- Production Calendar
- Artists Resume/Statement
- Dance History
- Careers in the Field
- Directing and Auditioning
- Mentorship
- Alumni Talks
- An informal showing
- Project descriptions
- Current ideas and events in the field

## Dancer Wellness

Classes in injury prevention and nutrition are offered to all dancers during the academic year. In addition, our physical therapist Lisa Altamirano, specifically trained to address the special needs of a dancer, visits the campus bi-weekly to monitor the dancer's physical conditions. <u>https://www.myagilept.com/</u>

#### Pilates

Pilates is a system of exercises that is based on six principles; breath, coordination, center, control, precision, and flow. Practicing Pilates can enhance strength and flexibility, as well as develop body awareness and improve alignment. Pilates for dancers is an excellent source of body conditioning, fostering cross-training and injury prevention.

Besides these courses students also receive instruction in other forms that include but are not limited to Jazz, Contemporary, Yoga, Dance Improvisation and Composition, Pointe, Partnering, West African and Hip Hop.



Music asfaschool.org/music

## **Applied Music**

The following course work relates to actual music performance.

**Applied Major Study** (One lesson weekly) - The weekly private lesson with a specialist studio instructor, and the individual student practice regimen necessary to prepare thoroughly for each lesson. The long-range objective is to develop maximum technical proficiency and musical artistry in vocal/instrumental performance. Individual requirements vary with age and experience;

however, students are generally assigned technical work (vocal exercises for singers, scales/arpeggios and etudes for instrumentalists) as well as appropriate solo repertoire. As the student progresses, needs inevitably change and the course of study will undergo some revision. (.7 credit per semester)

**ASFA Orchestra** (Admission by audition) - This ensemble constitutes the primary performing group from the Music department. The Orchestra annually presents dozens of performances both onand off-campus. Members furnish their own formal wear for evening performances. (.1 or .2 credit per semester)

**ASFA Choir -** Singing is the most fundamental of all musical activities; therefore, it is essential that music majors develop a modicum of vocal ability and a familiarity with the myriad of vocal music which pervades every culture in the world. Since solo and part-singing in a group constitutes the most efficient means to achieve a general competency, all music majors will participate in choir rehearsals and performances. (.1 or .2 credit per semester)

**Concerto della Donna** (Admission by audition) - This select vocal ensemble is featured at designated performances throughout the year. Made up of female voice majors and instrumentalists. (.1 credit per semester)

**Chamber Ensembles -** Students participate in small group ensembles of 2 to 12 players coached by a faculty member each week. (.1 credit per semester)

Jazz Ensemble (Admission by audition) - Study and performance of jazz standards. History of Jazz, Jazz Harmony and Improvisation are included. Students participate in multiple performances at ASFA and across the state. (.1 credit per semester)

**Vocal Repertoire -** Group experience allowing vocalists to perform works-in-progress for peer observation and critique. Theoretical and historical aspects of the music under study may be shared in group discussion. (.1 credit per semester)

**Piano Repertoire/Literature -** Group experience allowing pianists to perform works-in-progress for peer observation and critique. Theoretical and historical aspects of the music under study may be shared in group discussion. Techniques for accompanying and performing chamber music with instrumentalists and vocalists are included. (.1 credit per semester)

## **Practical Music**

The following course work relates to the development of musicianship skills.

**Music Theory** (Beginning level through Advanced Placement level) - These courses are designed to facilitate learning of musical style and practices in order to gain an understanding of the organization of music and its principles. Students develop skills in analysis, part-writing, and form in music. (.3 to .5 credit per semester)

*Ear-training/Sight-singing* (Beginning level through Advanced Placement level) - These courses are de-signed to develop the student's fundamental aural and sight-reading/singing skills. They are

trained in music dictation and the singing of music examples in solfège. (.4 to .6 credit per semester)

*Music History -* This is a comprehensive course covering the music of the Western world. It is taken during the senior year. Students learn to think and read critically and are engaged in critical discussions about music. (.3 to .5 credit per semester)

**Class Piano -** All upper division non-keyboard majors are required to complete Class Piano by learning and demonstrating proficiency in playing all major/minor scales, arpeggios, harmonic cadences, rudimentary solo pieces and simple sight-reading. This course is taken during the junior year. (.2 credit per semester)

## Expectations

#### Credits

Students in grades 9-12 earn two credits per semester, one for Applied Music and one for Practical Music.

#### **Extracurricular Performances**

Students participate in extracurricular performances to the extent that such performances do not interfere with scheduled ASFA activities, and that they reflect favorably upon the individual and the institution.

## **Enrichment Activities**

Students customarily participate in All-District, All-State Jazz Band, All-State Choir, All-State Band and Orchestra, Alabama Symphony Youth Orchestra, other area ensembles, summer music camps and festivals, and independent study with guidance by faculty advisors.

#### STUDENT RECITALS

Student Recitals are scheduled at 2:45 p.m. in the Hess-Abroms Recital Hall on designated weekdays (usually Wednesdays) throughout the academic year. All music majors are required to perform in a Student Recital at least once each semester. To ensure balanced programming with regard to repertoire and length, students will be given specific assignments. Student Recitals fulfill three specific needs:

(1) Students are afforded the opportunity to "try out" a work-in-progress under actual performance conditions.

(2) Periodic performance at regular intervals allows the music faculty to monitor individual student progress.

(3) Since Student Recitals are free and open to the public, peers from other disciplines as well as interested persons from the community are able to enrich their own cultural experience by attending. Although presented on campus, Student Recitals are public performances nonetheless. Participants dress and act with appropriate concert decorum in order to project a positive image for the Department of Music.

#### SEMESTER JURIES

The Semester Jury constitutes a final examination grade in Applied Major Study. Accordingly, it represents one-fifth (20 percent) of the semester Applied Major Study grade average. Semester Juries are scheduled in continuous 15-minute increments near the end of each semester. Semester Jury requirements include, but are not necessarily limited to the following:

(1) Demonstrated proficiency in the execution of selected scales and arpeggios from memory for instrumentalists, vocal exercises for singers.

(2) Performance of at least two contrasting pieces, movements or songs with keyboard accompaniment. Vocalists and pianists will perform from memory; instrumentalists must perform at least one of the solo works/movements from memory.

(3) Sight-reading, i. e., demonstrated proficiency in the execution of music at first reading for instrumentalists, sight-singing with solfege syllables for vocalists.

The Applied Major Study instructor may have additional requirements for each examination; therefore, it is advisable for the student, instructor and parent(s)/guardian(s) to communicate at regular intervals throughout the semester to ensure compliance with all requirements.

Semester Juries are evaluated by a panel comprised of the music faculty and a guest juror from the community, using established grading criteria:

**TONE PRODUCTION/INTONATION -** For instrumentalists and vocalists this refers to both the quality of sound and the degree to which the soloist is able to match pitch with the piano and/or any other participating instruments or voices. For pianists, this refers to the evenness of sound.

**DYNAMICS -** The range of volume from extremely soft to extremely loud and the skill with which the performer is able to control the volume.

**ARTICULATION -** This refers to the control of attacks and releases of sound. Diction and foreign language pronunciation will also be considered in the case of vocalists.

**PHRASING -** Inflection of the melodic line to communicate the composer's musical intent, analogous to the inflections of speech an actor would utilize to convey the essence of meaning in the words of a play.

**TECHNICAL FACILITY -** The degree of physical proficiency with which the music is executed, including memorization, when applicable. Technical facility applies to all aspects of physical execution specific to each instrument or voice.

**ARTISTIC IMPRESSION -** The aural and visual effect of the presentation including the aesthetic qualities of the performance, appearance and stage demeanor. The final Semester Jury grade is calculated by averaging all the grades submitted by the panel. Juniors and seniors are exempt from Semester Juries during the semester in which the Junior or Senior Recital is presented and the Recital grade replaces the Semester Jury grade as the final examination grade in such instances.

JUNIOR/SENIOR RECITAL - In lieu of a Semester Jury, music majors present a half recital of solo repertoire during the Junior year, and a full recital during the Senior year. Senior Recital is the culmination of applied music study at ASFA. Through this experience the candidate for graduation demonstrates not only technical accomplishment but also an understanding of musical form and style pertinent to various historical periods, awareness of the composer's artistic intent and the means to aesthetically convey that in a performance environment, and a well-developed stage demeanor and personal poise. Thus, Senior Recital indicates artistic growth and maturity requisite for matriculation to advanced study at the college/conservatory level. Since this experience is unique to ASFA, it is also a time of celebration, for it delineates one of the final phases of preparation. In partial fulfillment of the Department of Music requirements for graduation, all music majors must present solo public recitals as follows:

**JUNIOR RECITAL -** Thirty minutes (or more) of standard solo repertoire, including ensemble chamber music, if appropriate.

**SENIOR RECITAL** - Forty-five minutes (or more) of standard solo repertoire, including ensemble chamber music, if appropriate.

## GENERAL REQUIREMENTS

(1) The recital date will be selected as early as is practicable. The major applied music instructor, student and chair will collaborate on date selection. The chair will secure clearance and approval from the music faculty, subject to availability for grading. Appropriate calendar requests will be submitted by the chair with the concurrence of the music faculty.

(2) Keyboard accompaniment, as needed, will be provided by ASFA on the following basis: Three hours of rehearsal for Junior Recital and five hours of rehearsal for Senior Recital. Pending departmental approval, non-ASFA accompaniment may be used; however, in such instances the student assumes complete responsibility for any and all costs incurred. In the event the program includes chamber music, the student is responsible for ensuring the quality of participating musicians as well as any costs incurred. Composition majors are responsible for securing all musicians needed to render their works selected for presentation, as well as any costs incurred.

(3) In keeping with current standard American conservatory practice all vocalists, pianists and guitarists must perform the entire program from memory, except as noted in paragraph 4 below. All other instrumentalists must demonstrate the ability to memorize by performing at least one substantial work from memory.

(4) When practical and appropriate, ensemble chamber music may be included on any recital program; however, ensemble chamber music can comprise no more than 25 percent of any recital. Chamber music performances, including those presented by vocalists, pianists and guitarists, need not be memorized.

(5) Appropriate attire will be worn for all recitals. While desirable, formalwear need not be purchased or rented; however, at minimum, ladies are expected to wear a conservative dress and gentlemen are expected to wear a conservative dark suit. All performers must demonstrate proper performance demeanor and appropriate acknowledgment of participating performers and audience response.

(6) Recitals will be evaluated by at least two members of the music faculty, using the same criteria as Semester Jury. An overall grade for the recital will be calculated by averaging all of the grades submitted. To ensure objectivity, the major applied music instructor will not participate in this evaluation so as not to unduly influence the overall average grade.

(7) All recitals will be scheduled to commence at 3:15 p.m. on Tuesdays as well as some Thursdays throughout the academic year. Only seniors may petition for a scheduling variance. Any scheduling variance for a Senior Recital must be by mutual consent of the student, parent, applied music instructor and accompanying musicians pending written departmental approval.

#### TIMETABLE

90 DAYS PRIOR TO PERFORMANCE - The recital date will be considered firm.

**45 DAYS PRIOR TO PERFORMANCE** - A complete program, computer typeset, camera ready, with program notes written by the student and signed as approved by the applied music instructor, will be submitted to the chair for departmental review and final approval. Program notes will be evaluated as part of the student's Music History grade during the semester in which the program is presented. Samples of previous programs with page setup specifications will be provided for reference.

**30 DAYS PRIOR TO PERFORMANCE** - The student will play representative selections for a music faculty review committee, comprised of at least two faculty members. The faculty review committee may elect to hear part or all of any and all selections to be programmed. If the student has elected to utilize non-ASFA accompaniment, the accompanying performer(s) must be present for this preliminary performance review to ensure compliance with ASFA performance standards. Pending approval, the recital will be presented as scheduled. If in the judgment of the music faculty, the student does not demonstrate requisite competency, the recital date will be postponed. When a recital is postponed a meeting among the student, parent(s), applied music instructor, counselor(s), music faculty and the Vice President of Curriculum and Instruction will be scheduled as soon as possible to review the reason(s) for postponement and to discuss steps necessary to effect remediation. A subsequent preliminary performance review will be scheduled within two weeks of this meeting. If, in the judgment of the music faculty, sufficient progress, the recital will be rescheduled. If the student has not made sufficient progress, the recital will be cancelled.

When a Junior Recital is cancelled, the student will prepare and perform the program in its entirety at the regularly scheduled time for Semester Juries at the end of the semester in which the recital was to be performed. The faculty committee empaneled for Semester Juries will evaluate the performance, and the average grade attained will be recorded as the final grade for the semester. When a fall semester Senior Recital is cancelled, the student will prepare and perform the program in its entirety at the regularly scheduled time for Semester Juries at the end of the semester in which the recital was to be performed. The faculty committee empaneled for Semester Juries at the end of the semester in which the recital was to be performed. The faculty committee empaneled for Semester Juries will evaluate the performance, and the average grade attained will be recorded as the final grade for the semester. The program will then be rescheduled for public performance during the spring semester. When a spring semester Senior Recital is cancelled, the senior will not be permitted to participate in commencement exercises. In order to receive the ASFA diploma, the student will be required to perform the complete recital during the first week after school has ended for the summer.



Theatre Arts asfaschool.org/theatre-arts

The goal of the path of study in the Theatre Arts Department is to provide a foundation of thorough training and practical experience which empowers young artists with a comprehensive understanding of the world of Theatre.

Students are guided through a four-level progression of classes designed to prepare them for further study at conservatories and universities both nationally and internationally. Graduates from our program have been accepted to NYU-Tisch, CalArts, University of Southern California, North Carolina School for the Arts, Uta Hagen Institute, New York Film Academy, Royal Conservatory of Scotland, and the University of the Arts, Philadelphia. Many of our Alums are working professionals in stage, television and film as actors, directors, designers and technicians. While others have found satisfaction in careers as lawyers, priests,

teachers, and business owners because skills like focus, time management, cooperation and personal responsibility learned in theatre translate well to many different fields.

Students study theatre three hours a day, five days a week with periodic additional rehearsals and performances held outside of regular school hours. Formal classes are held daily with time built in for rehearsals and/ special emphasis presentations.

#### Theatre Arts Curriculum Standards:

There are four levels of study which students are placed corresponding with their grade upon entering the school.

**Level One** - Students learn basic stage acting terminology, text analysis and explore character obstacles while building an awareness of their bodies through the use of yoga, dance and mime training. Simple scenery and costume construction techniques are introduced along with the use of scene painting and stage makeup.

• Acting Fundamentals I and II; Intro to Movement and Dance; Pantomime; Intro to Stage Craft; Intro to Costumes and Make Up; Production I

**Level Two** - Fundamentals from level one are built upon including audition technique and scene work Students study vocal technique using the Linklater and Alexander methods They also learn the process of developing their own work by writing and performing scenes and monologues. A thorough training in proper stage management and show tech preparation is stressed while the elements of art design are placed in context of theatrical uses.

• Intermediate. Acting; Voice and Speech I; Devised Theatre; Design Fundamentals; Stage Management; Movement II; Production II

**Level Three** - Juniors prepare monologues for college auditions and national competitions while preparing for their senior year through leadership roles and responsibilities. The students learn to manipulate technical areas through design. Advanced acting techniques are explored with an emphasis on scene study.

• Scene Study I; Monologue Study; Costume Design; Scene Design Theatre History and Literature; Playwriting; Production III

**Level Four** - Seniors study techniques of directing, then present scenes with their fellow students. Students learn vocal delivery techniques for voice overs and recorded media. Advanced technical elements are taught in lighting design and sound production to facilitate the execution of their final project. Yoga, meditation and dance are used to emphasize the importance of physical and emotional awareness for the health of the performer. As a requirement for graduation, seniors are required to produce a piece of work of significance like a major design/technical project or a oneact performances which highlights the skills learned while at ASFA.

• Directing/Senior Practicum; Scene Study II; Senior Directed Scenes; Movement for the Mind and Body; Sound Production; Lighting Design; Production IV;

In addition to classes, students participate in two main stage shows, a touring and outreach program, student directed scenes, semester showcases and senior one-act presentations. All students are assigned roles either as actors on stage or as technicians and stage managers. All aspects of our productions are generated by students with the guidance of teaching artists who bring industry experience to the classroom. Internships with local theatre groups are encouraged for those students who wish to supplement their experiences outside the school. Guest Artists and adjunct instructors are brought in to provide special skills and master classes throughout the year.



## Visual Arts asfaschool.org/visual-arts

ASFA Visual Arts students engage in studio work in painting, sculpture, printmaking, filmmaking, photography, drawing and art history. Each artist has access to community studio space where they can work amongst their peers. It is through collaboration and inspiration that artistic vision develops. The Vulcan Materials Gallery (on campus) provides students the opportunity to gain vital installation experience and formally display their artwork.

Students are continuously inspired by the achievements and awards of their faculty in the professional art world. This year Art Department Chair Darius Hill has been commissioned to display a prominent sculpture for the Birmingham Museum of Art. ASFA art students have won prestigious awards for their work such as: Best in Show-2018 Alabama Student Juried Art Exhibition, Gold Medal -2018 National Scholastic Art Competition, and first place in the Magic City Art Connection High School Sculpture Competition. Visual Arts alumni continue on to highly esteemed art programs and fellowships. They are active in many artistic endeavors and are well represented in the fields of illustration, design, architecture, fashion, art therapy, art education, museum curation, and the fine arts.

#### Admission Criteria:

The Visual Arts department determines an applicant's eligibility to enroll in the program based on the following criteria:

- 1. Portfolio, Technical Ability, Technical Versatility, Originality
- 2. Audition Day Drawing, Compositional Awareness, Accuracy of Observation, Aesthetic Sophistication, Assignment Fulfillment
- 3. Audition Day Interview, Responsiveness, Articulation, Selfmotivation, Sincerity, Confidence, Respectfulness, Maturity, Independence

## Expectations

## Grading

Students' grades are determined by evaluation according to following expectations:

- 1. Efficient use class/studio time.
- 2. Satisfactory completion of all project assignments.
- 3. Adherence to all deadlines.
- 4. Attentiveness
- 5. Promptness and preparedness
- 6. Participation in class discussions and critiques
- 7. Individual progress

Satisfaction of all of the above requirements is expected and is therefore considered average.

#### Graduation

A diploma from the Visual Arts Department is awarded upon the completion of the following:

- 1. Successful completion of all required courses.
- 2. Presentation to faculty two weeks prior to scheduled senior exhibition a minimum of 36 major art works for evaluation and consideration. (Major art works are those, which in the opinion of the Visual Art Faculty, exhibit a high degree of finish and are the result of a concentrated effort. Sketches, class figure studies, and uncompleted works are not acceptable.) It is only from original art works completed during the senior year's course work and new works that may be assigned by the Visual Arts faculty that the senior exhibition will be chosen.

3. One week prior to the senior exhibition date the first draft of a senior statement is due in triplicate to the Visual Arts Chairman. This should be a concise thesis statement regarding the personal aesthetic developed by the senior.

4. Once chosen, all works shall be prepared (framed, striped, matted) for exhibition and shall be ready for installation one week prior to the opening.

- 5. Final draft of senior statement is due four days prior to the opening.
- 6. Successful completion of Senior Exhibition.

7. Each student will leave ASFA one art work from the senior exhibition. This work shall be determined by agreement of the faculty and student. All others shall remain property of the student and should be removed from school property within one month of the closing exhibition date.

## Art Supplies

Most art supplies shall be provided by the individual student. Instructors attempt to keep the list of materials as affordable as possible, but in many cases, such as in the purchase of oil paints and brushes, the costs are unavoidable. However, with proper care many of the tools should last beyond the full tenure at ASFA. If at any time a student is unable to purchase materials because of financial hardship the parent should contact the instructor, who can arrange assistance. Students shall receive supply lists in ample time to make the necessary purchases. Those schedules will almost always include a weekend for convenience. To perform the required tasks students must have their materials on a timely basis. Parents should encourage students to be responsible for their own purchases.

#### **Power Tools**

In the advanced classes (grades 9-12) it is often necessary to use electric power and pneumatic tools, both hand-held and permanently based. When used improperly, these tools can cause severe injury. Therefore, it is necessary that each parent give written permission for their use. A list of regulations is provided at the beginning of the school year for student and parent validation, as follows: 1. Power tools (electric or air-driven) may be used only during scheduled Visual Arts classes. 2. Students must have permission from a Visual Arts Instructor before each use of any power tool. 3. Power tools must be used properly, as demonstrated, using safety gear. 4. Any student found handling any power tool irresponsibly will be subject to immediate disciplinary action. 5. Any student found distracting a student who is using a power tool will be subject to immediate disciplinary action.

#### All courses listed are required for completion of a six-year diploma.

The Visual Arts Department of the Alabama School of Fine Arts offers an advanced course of study in traditional fine art mediums and the history of art. Instruction emphasizes visual awareness, original and creative thinking, critical analysis, and excellence of technique and craftsmanship. Students perform daily studio work including drawing, design, painting, print-making and sculpture. Upon completion of this program, a highly motivated student is prepared for higher educational institutions, universities, and art schools.

#### Visual Arts Curriculum:

**Art Foundation (Grades 7-10)** - A four-year studio course deals with form and unity in regard to the structural, compositional and proportional organization of line, shape, value, texture and color. These fundamental elements of art are understood and explored through the manipulation of various materials and techniques.

**Drawing (Grades 7-11)** - A six-year course that begins as an introduction to traditional drawing media and their use to achieve proficiency in rendering. The course moves incrementally to drawing as a means of communicating personal content and individual aesthetics in the upper levels.

**Art History (Grade 11)** - One-year chronological survey of World Art History, Pre- history through Contemporary, taught during the junior year. The accompanying text is the university standard **Gardner's Art through the Ages,** which is supplemented with additional readings. A requisite course for the visual arts major, it is open as an elective for all others. **Painting I (Grade 9**) - One-semester course introducing the fundamentals of water-based media such as watercolor, India ink and acrylic paints.

**Painting II (Grade 10)** - One-semester introduction into oil painting techniques as a means of investigating color, mark, material, subject matter, and content.

**Painting III (Grade 11)** - One-semester course that emphasizes content, the formal and emotive aspects of painting and the interrelationship of form, matter, and content.

**Sculpture I (Grade 9)** - One-semester course that emphasizes structure and volume through 3-D design.

**Sculpture II (Grade 10)** - One-semester course with emphasis on problem-solving, formal concepts, and construction.

**Printmaking (Grade 11)** - One-semester course that explores traditional and non-traditional materials, and the interrelationship of form, matter, and content.

**Studio (Grades 11)** - Two-semester tutorial class that allows the student to explore and develop a personal aesthetic.

**Senior Thesis (Grade 12)** - Two semesters of independent study. All seniors have the opportunity to explore the creative process, discovering their own artistic sensibilities. The course results in a substantial, cohesive body of work and a senior exhibition at the end of the year.



# Math-Science

asfaschool.org/math-science

The specialty curriculum consists of required and elective courses. Each student takes a major mathematics course and a major science course each semester. These courses follow a required sequence for most students. Under unusual circumstances students may request changes in the sequence based on prior schooling. Most students take at least one Math/Science elective course in addition to their major courses. Although not required, it is highly recommended. Not all electives are offered every semester.

#### **Advanced Standing**

Some students enter the department having completed one or more of the required courses. Every effort will be made to accommodate such students if it can be determined that their prior experience has been a good match for what is offered within the department.

#### Advanced Placement (AP) Examinations

Math/Science specialty courses designated AP/Honors prepare students to take the Advanced Placement (AP) Examination in those subjects. These are in Biology, Chemistry, Physics, Calculus, Statistics, and Computer Science Principles. However, the content of each course is not specifically tied to the AP Exam. In Chemistry the volume of material is so great that the Advanced Topics course is strongly recommended as a companion to Honors Chemistry. **Required Course Sequences** - Students enter the Math/Science Program in grades 8 - 11. The vast majority enter in grades 8 or 9. The program routinely requires the course sequence described below, but circumstances and a student's background may dictate changes, which the Supervisory Chair of Math/Science must approve in advance.

## **Required Sequence in Mathematics**

Honors Algebra I (Grade 8) – A rigorous study of the fundamental structure of the real number system. Throughout, the course gives attention to the algebraic properties and operations. Students learn to use mathematics effectively through a variety of problems, in questioning, and open-ended problem solving. Students see how mathematical ideas fit into a larger context and use experiments that include the use of higher order thinking skills in daily assignments. Students use calculators, graphing calculators, and computers. This course thoroughly integrates and makes connections to other areas of mathematics, to other disciplines, and to the real world. (2 credits)

Honors Geometry (Grade 9) - Develops a student's ability to reason correctly, to try new ideas and to 35 solve problems. This course emphasizes the application of geometric ideas to natural and physical phenomena. It develops skills in visualization and pictorial representation of concepts. Honors Geometry integrates coordinate and transformational views of geometry with the traditional synthetic approach. Such integration enables students to see the unity in mathematics while solidifying algebraic skills. (2 credits)

Honors Algebra II/Trigonometry (Grade 10) - A study of variables, equations, and graphs within the content of data analysis. To use linear and nonlinear algebraic equations, students analyze reallife data then construct mathematical models that best fit the data. Students use computers and graphing calculators to create meaningful visual representations of algebraic concepts. To improve critical thinking, students explain, verify, justify and interpret routine and non-routine problems individually or in groups. Students complete assignments promptly, neatly, and in a required format. (2 credits)

**AP/Honors Statistics** (Grade 11) - Uses a calculus-based approach to examine and apply the concepts of probability, descriptive statistics and inferential statistics. The class focuses on student collected data and the use of exploratory data analysis to examine the data. Students are prepared to take the AP Statistics Examination. (1 credit)

**AP/Honors Calculus** (Grade 11 or 12 - Prepares students to take the Advanced Placement Calculus BC Examination, although the exam is not required. The course uses a "reform" approach. This approach gives meaning to the symbols and develops students' insight while illuminating questions in the physical sciences, engineering, and the social and biological sciences. Each topic is covered numerically, graphically and algebraically. (2 credits)

*Linear Algebra* (Grade 12) - A college-level semester-long mathematics course for students of engineering, science, and mathematics. This course is a study of linear systems of equations, vector spaces, and linear transformations. Solving systems of linear equations is a basic tool of many mathematical procedures used for solving problems in science and engineering. The class

helps students develop abstract and critical reasoning by studying logical proofs and the axiomatic method. (1 credit)

**Differential Equations** (Grade 12) - A college-level semester-long mathematics course which will introduce students to modeling the real world in terms of differential equations. The laws of nature are expressed as differential equations. Many properties of differential equations have been understood mathematically and they have a history of being successfully applied to important problems in all areas of science and engineering. This course will introduce primarily linear, first-order, and second-order differential equations. Solution techniques for separable equations and homogeneous and inhomogeneous equations as well as a range of modeling-based applications arising in the context of engineering, physics and chemistry will be presented. The application of Laplace transforms to differential equations, systems of linear differential equations, linearization of nonlinear systems, and phase plane methods will be covered. Fourier series, a useful tool in signal processing, will also be introduced. (1 credit)

#### **Required Sequence in Science**

**Honors Physical Science** (Grade 8) - Stresses that science is not about memorizing facts but rather is a continuous process of questioning and testing ideas. The year starts with an algebra and trigonometry based physics course. Throughout the year, there is effort to apply concepts introduced in students' mathematics courses. At the start of the second semester, the course becomes a rigorous introductory level chemistry, with emphasis on learning how to draw conclusions and support them with collected data. (2 credits)

**Honors Biology** (Grade 9) - Designed as a pre-AP Biology course, which is a prerequisite for AP Biology. The course will introduce the student to scientific inquiry through studying cellular processes, bioenergetics, genetics, ecology and biodiversity. This course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze those interrelationships, to evaluate the risks associated when problems arise, and to examine alternative solutions for resolving or preventing them. Students will be taught both the content and the skills that they need to succeed in science classes in the future. (2 credits)

**AP/Honors Chemistry** (Grade 10 or 11 or 12) - Explores the composition, structure and properties of substances and the transformations that they undergo. Students use factual knowledge as the basis for creative 36 approaches to solving problems, using critical thinking, trial and error, intuition and (above all) patience. Class is taught in a modified lecture style that allows for constant student-teacher, student-student interaction. Laboratory is an integral part of the course and special emphasis is placed on both oral and written expression of scientific concepts. The course prepares students for the Advanced Placement (AP) Chemistry exam. Students receive training for outreach in chemistry related topics. (2 credits)

**AP/Honors Biology** (Grade 10 or 11 or 12) - Designed to be the equivalent of a college introductory biology course, covering three general areas: Molecules and Cells; Heredity and Evolution; and Organisms and Populations. The course's two main goals are that students develop a conceptual framework for modern biology and gain an appreciation of science as a process. Primary

emphasis is placed on developing an understanding of concepts rather than on memorizing terms and technical details, with attention to eight recurring themes: Science as a Process; Evolution; Energy Transfer; Continuity and Change; Relationship of Structure to Function; Regulation; Interdependence in Nature; Science, Technology, and Society. The course prepares students for the Advanced Placement (AP) Biology exam. (2 credits)

**AP/Honors Physics** (Grade 12) - The equivalent of a college physics course usually taken by physics and engineering majors during their first or second year, providing an extensive introduction to fundamental concepts of physics in topics including Newtonian mechanics, thermodynamics, modern or "quantum" mechanics, optics, and electricity and magnetism. The course prepares students for the college physics sequence and for the Advanced Placement (AP) Physics C exam (Mechanics or E&M), with emphasis on concepts, problem-solving, and sound mathematical techniques. It also prepares students for any entry level, calculus-based college physics course. (2 credits)

#### Additional Requirements

Introduction to Computational Thinking (Grade 8) - Computational thinking is the new, in-demand, 21<sup>st</sup> century literacy skill every student needs. This semester long course will provide students the opportunity to explore the thinking practices associated with computer science. The course provides students with the opportunity to practice the four arts of computational thinking: decomposition, pattern matching, abstraction, and algorithms. Students will hone their skills in Boolean logic, decisions and repetition through unplugged activities, programming micro-controllers and reflection on their work products. The first 11 weeks of the course will be focused on an overall introduction to computational thinking and computer science and the last 5 weeks will be focusing on networking concepts. Students will develop an ability to think computationally, which will prepare them to take AP Computer Science Principles in the 9<sup>th</sup> grade. (0.5 credit)

AP Computer Science Principles (Grade 9 & new students entering in Grades 10 and beyond) -Designed to introduce students to the central ideas of computing and computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing and computer science change the world. The course is challenging and rich in computational content, includes computational and critical thinking and skills, and engages students in the creative aspects of the field. Through both its content and pedagogy, this course aims to appeal to a broad audience. The key concepts and related content are organized around seven big ideas involving six computational thinking processes. In this course, each of the big ideas (Creativity, Abstraction, Data and Information, Algorithms, Programming, the Internet, Global Impact) is taught in conjunction with one or more of computational thinking practices (Connecting Computing, Creating Computational Artifacts, Abstracting, Analyzing Problems and Artifacts, Communicating, Collaborating). Essential questions that students will explore are posed for each of the big ideas. These ideas connect students to a curriculum scope that includes programming but is not programming focused. Additionally, students will have opportunities to build their writing skills through portfolios, journals and technical writing. Weekly journal entries reflecting on learning and explaining the technical aspects of what has been learned are required for each student. Prerequisite: MS students - completion of Algebra I; Non-MS students completion of Algebra II. (1 credit)

**Research I** (Grade 9 & new students entering in Grade 10 and beyond) - Designed as an introductory to the fundamentals of scientific research. Students will explore, create, and model processes involved in conducting a scientific investigation. In addition, students will design and complete an independent research project for the International Science and Engineering Fair (ISEF) regional qualifier (CARSEF) as well as develop skills necessary to successfully complete the Senior Research graduation requirement. The course design emphasizes the fundamentals of scientific research where students will explore, create, and model the processes needed for conducting a scientific investigation. Units of instruction will center on developing the main elements of a scientific report: Introduction, Methods, Results, Discussion, and Conclusion. (0.5 credit)

**Research II** (Grade 11) - Course prepare students to successfully design and complete an independent research project for the senior research symposium culminating at the end of the senior year. This includes developing time management skills, oral and visual presentation skills, student-centered learning approaches, and critical thinking skills needed to review and constructively criticize the work of peers and professionals in the area of research. This course design emphasizes the fundamentals of scientific research where students will explore, create, and model the processes needed for conducting a scientific investigation. Topics covered will include but not limited to ethics in research, experimental design, methods of data collection, data analysis (use of statistics for evidence/reliability), literature review and critique of published work, writing a conclusion, citing and listing resources, and the peer review process. (0.5 credit)

**Senior Independent Research Project** (Grade 12) – The research experience usually begins during a student's junior year. The student is required to develop a research question in an area of interest: mathematics, science, or computer science. There are three components to the research project:

- The practicum research experience in a laboratory
- The written research paper
- An oral presentation

The goal of this experience is to provide seniors with a hands-on research experience and a comprehensive scientific project. (1 credit)

#### **Electives in Mathematics**

<u>Note</u>: The listing below is not meant to be complete. The faculty designs and teaches new electives each year to add to the list.

**Euclid Team** (Grade 8) - Designed to prepare students for competition on the Algebra I team. Students are taught math problem solving techniques and critical thinking skills with activities are designed to supplement and enhance the regular curriculum. (0.5 credit/semester)

**Phi Team** (Grade 9) - Designed to prepare students for competition on the Geometry team. Students are taught math problem solving techniques and critical thinking skills with activities designed to supplement and enhance the regular curriculum. (0.5 credit/semester) Art of Problem Solving I/II (Grades 10-12) - Designed for students who are seriously interested in developing their math problem solving techniques and critical thinking skills. <u>Prerequisite</u>: Passion for doing math and finding a joy in challenges; permission of the instructor required. (0.5 credit each)

**Applied Mathematics** (Grade 11-12) - For the math student who would like to continue the exploration of college level math topics and the development of their math problem solving/critical thinking skills. (0.5 credit/semester)

**Mathematical Modeling** (Grade 10-12) - This course is an introduction to mathematical modeling which will be a problem driven approach to many applications of mathematics (Probabilistic Modeling, Modeling with Decision Theory, Game Theory, Optimization, Modeling using Graph Theory, Experimental and Simulation Modeling) with a focus on design and analysis of models using mathematical tools. In this course students will learn how to construct empirical models, do model analysis, and do model research. We will mainly work with discrete models but with the potential for continuous models. Technology used for course will be python, excel, and a TI Nspire calculator. <u>Prerequisite</u>: Algebra II/Trigonometry & AP Computer Science Principles. (½ credit)

#### **Electives in Science**

<u>Note</u>: The listing below is not meant to be complete. The faculty designs and teaches new electives each year to add to this list. During any given school year, some of these electives are offered:

**AP Environmental Science** – This course is an interdisciplinary course that encompasses natural sciences, 38 applied environmental science and social science. APES offers students a chance to understand both basic ecology and modern environmental issues. APES stresses rigorous scientific principles, inquiry-based labs, quantitative analysis and articulation of student understanding through writing. This yearlong course meets for 45 minutes each day, and 3 hours of homework per week is expected.

<u>Pre-requisite</u>: completion of Biology, Chemistry and Algebra II, unless approved by instructor. (1 credit)

**AP Psychology** (Grade 11 or 12) - 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. (1 credit)

**Marine Biology** (Grades 9-12) - A course offered to all students at the Alabama School of Fine Arts who have taken a high-school biology course. The first part of the course focuses on marine ecology, human impacts and conservation in a project-based format. The course is designed to facilitate student understanding of oceans and the interactions between humans and the marine environment. Students are expected to work together to explore the functioning of marine ecosystems and the issues which threaten them. The second part of the course gives students the opportunity to further explore the issues which they were exposed to in the first part. Students use primary sources to expand their knowledge of their chosen topics and produce literature reviews and creative projects. <u>Pre-requisite:</u> Honors Biology. (0.5 credit)

Introduction to Electricity (Grades 10-12) - Designed to introduce students to introductory concepts of electricity and DC currents. Topics covered include DC current design, the use of probes, current boards, and digital meters, resistors, and capacitors and their functions. Other topics include Ohm's Law, Kirchoff's Loop rule and circuits with resistors and capacitors both in series and parallel. Students will further explore these concepts via a minimum of eight to ten hands-on activities on computer simulation laboratories. <u>Prerequisite:</u> Algebra I. (0.5 credit)

**Introduction to Space Science** (Grade 9) - Explores the mysteries of the universe in this laboratorybased course. Is there life out there on other terrestrial bodies? Students will examine the possibilities of where life came from on Earth, make comets, and examine how stars are born and how they die. Astrophysics and stargazing with a homemade telescope will also be done. This course incorporates the scientific method of study and all disciplines of science to discover what makes up the universe. (0.5 credit)

**Organic Chemistry** - A year-long course. The first semester will focus on structure and bonding in organic molecules including isomers. Reaction mechanisms will be stressed and students will learn to design syntheses of compounds based on this knowledge. The second semester will continue to study reaction mechanisms with a focus on spectroscopy and application in biochemistry. There is a lab component for this course and will focus on chromatography, polarity, synthesis, functional group chemistry, and spectroscopy. Pre-requisite: completion of AP Chemistry. (1 credit)

#### **Electives in Computer Science**

<u>Note</u>: The list of courses below is not meant to be complete. During any given school year, some of these electives are offered.

**AP Computer Science A** (Grade 11 or 12) - A year-long course intended as a college-prep course for students planning to study computer science or other technical fields. However, this course is suitable for all students with an interest in computer programming. Even some non-technical fields require students be familiar with basic computer programming. Since programming is the main component of computer science, a large portion of this course will be devoted to the design and implementation of computer programs to solve a given problem. In addition to understanding computer programming in general, and the Java language in particular, students will gain a clear understanding of the process of analyzing problems, proposing and evaluating solutions and implementing those solutions that are appropriate to program. Students will leave this class with the ability to solve new problems and adapt to new programming languages and methodologies that they will encounter in future school and job related assignments. This course emphasizes programming methodology, procedural abstraction and the in-depth study of standard algorithms and data structures. Students will also study the history of computing and basic

hardware and software components of computer systems, as well as the ethical, responsible use of these systems.

Prerequisites: AP Computer Science Principles and permission of instructor. (1 credit)

**Problem Solving with C++** - A year-long course in which students develop their ability to create original programs to solve a wide variety of common programming problems. Although this course requires students to have completed AP Computer Science Principles, it does not assume prior knowledge of any particular programming language. Topics include selection, iteration, functional decomposition, recursion, memory allocation and dynamic data structures, classes and objectoriented programming, and incorporating library methods and other existing code into one's work. The course includes an introduction to computer organization and operating systems, including binary representation, CPU architecture, and programming for the Linux command line. <u>Prerequisite</u>: AP Computer Science Principles (1 credit)

**Make It with Computing I** - A one-semester course which introduces modeling with 3D coordinates, emphasizing algorithmic object design using tools such as OpenSCAD, with results physically rendered using a 3D printer. Some assignments will produce art and others will solve engineering problems. Enrolling students should have at least an intermediate skill level in programming. This course may be taken as an art or M/S credit, and may be taken independently of Make It With Computing II (0.5 credit)

**Make It with Computing II** - A one-semester course about creating programs that go beyond the usual keyboard, mouse, and screen for input and output. Students will work with sensors and microcontrollers and use devices such as Arduino Lilypads and Kinects to create programs that interact with users in creative ways. Enrolling students should have at least an intermediate skill level in programming. This course may be taken as an art or M/S credit, and may be taken independently of Make It with Computing I (0.5 credit)

Introduction to Artificial Intelligence - In this one-semester course, students will be introduced to the breadth of the artificial intelligence field through the development of projects employing varied AI approaches, such as machine learning, game trees, and first-order logic. Students will discover how the boundaries of the field are indistinct and change over time, and will also wrestle with the ethical and philosophical questions raised by AI. The course expects students to understand the fundamentals of programming, but specific programming requirements will be calibrated to the students' prior programming experiences. Prerequisite: AP Computer Science Principles. (0.5 credit) <u>Note</u>: The list of courses below is not meant to be complete. During any given school year, some of these electives are offered.

**Introduction to Engineering I** (Grade 9-12) - A high school level one-semester course designed for student who are interested in engineering. The main focus of this course is to provide exposure to various fields of engineering (mechanical, civil, aerospace, and electrical) as well as design process, teamwork, communication, and technical documentation through project-based learning. In addition, students will use both 3D modeling and circuit design software to help them design solutions to proposed problems. (0.5 credit)

**Introduction to Engineering II** (Grade 9-12) - A high school level one-semester course in which students work in teams to develop a unique solution to a real-world problem. Students will apply the skills accumulated in **Introduction to Engineering I** as well as potentially all of their previous courses. Student teams will submit frequent written documentation of their project progress and will give formal presentations of their work at both the midterm and end of semester. (0.5 credit)

# <u>Graduation Requirements Worksheet</u> (non-Specialty courses\*)

Student Name:

Department: \_\_\_\_\_

Grade Entered ASFA: \_\_\_\_\_

Grade	English	Mathematics	Science	Social Studies	Foreign Language	Fine Arts
	<b>4 credits</b> (8 Semesters)	<b>4 credits</b> (8 Semesters)	<b>4 credits</b> (8 Semesters)	4 credits (8 Semesters)	2 credits (4 Semesters)	0.5 or 1.5 credits** (1 or 3 Semesters)
9 <sup>th</sup>						
9 <sup>th</sup>						
10 <sup>th</sup>						
10 <sup>th</sup>						
11 <sup>th</sup>						
11 <sup>th</sup>						
12 <sup>th</sup>						
12 <sup>th</sup>						

#### 8<sup>th</sup> Grade World Language

\*For additional requirements, refer to specific specialty departments

\*\*M/S students are required to complete 3 semesters/1.5 credits of Fine Arts electives. All other students are required to complete 1 semester/0.5 credit of a Fine Arts elective from a Specialty department other than their own.

#### **Equal Opportunity Statement**

It is the policy of the Alabama School of Fine Arts not to discriminate on the basis of sex, race, religion, color, creed, national origin or any other proscribed category, in its educational programs, activities, or employment policies as required by local, state, and federal policies and laws. Inquiries or complaints regarding compliance with applicable laws or this policy may be directed to Dr. Tim Mitchell, President, Alabama School of Fine Arts, 1800 Rev Abraham Woods, Jr Blvd., Birmingham, AL 35203, or by calling him at (205) 252-9241.