



AESA Prep Academy

High School Course Catalog



2025-2026

**AESA Prep
Academy**

**Private College Prep School
K-12**



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AESA COURSE CATALOG

At AESA Prep Academy, we are proud to offer a comprehensive, college-preparatory academic program that is flexible, student-centered, and grounded in excellence. This catalog serves as your guide to the courses, electives, and specialized programs available for the upcoming academic year.

- Not all courses listed may be offered every year. Course offerings depend on student interest, staffing availability, and evolving program priorities.
- Some elective or specialty courses may have limited enrollment or require prerequisite, teacher/school approval.
- Courses may also be used to fulfill endorsement tracks, graduation plans, or individual college/career goals.

NEW PROGRAMS

This year, we're excited to introduce several innovative new programs and pathways designed to empower students with real-world skills and experiences:

- **Entrepreneurship Pathway** – Build, brand, and pitch your own startup through a hands-on, four-course sequence culminating in a Capstone Practicum.
- **Medical and Veterinary Science Pathways** – Explore careers in healthcare and animal sciences with rigorous academics, certifications, and field experience.
- **Financial Life Skills Program** – Learn personal finance through real-world application, including part-time work, credit-building, investing, and tax filing.
- **Business and Entrepreneurship** – Students gain real-world experience through courses in marketing, finance, and startup development, building skills for future leadership and innovation.

We invite all students and families to explore these exciting new additions in the Specialized Pathways & Programs section near the end of the catalog.

AESA GRADUATION PLANS & REQUIREMENTS

Students may pursue either the Recommended Diploma or the Distinguished Diploma, depending on their academic interests, personal aspirations, and postsecondary plans. Both pathways reflect AESA's commitment to academic excellence, whole-student development, and real-world readiness.

AESA Prep Academy Graduation Requirements

Subject Area	Recommended Diploma	Distinguished Diploma
English Language Arts	4 credits: English I, II, III, IV	4 credits: English I, II, III, IV
Mathematics	4 credits: Algebra I, Algebra II, Geometry, +1 Additional	4 credits: Algebra I, Algebra II, Geometry, +1 Additional
Science	4 credits: Biology, Chemistry, Physics, +1 Additional	4 credits: Biology, Chemistry, Physics, +1 Additional
Social Studies	4 credits: U.S. History, Gov. (½), Econ. (½), World Hist., World Geography	4 credits: U.S. History, Gov. (½), Econ. (½), World Hist. World Geography
Global Languages Other than English	2 credits in the same language	3 credits in the same language
Physical Education	1 credit	1 credit
Fine Arts	1 credit	1 credit
Speech	1 credit	1 credit
Technology	1 credit	1 credit
Health	1 credit	1 credit
Other Electives	3 credits	3 credits
Total Credits	26 credits	26 credits with 2 Dual Credits or Internship

See administration for specific graduation requirement options for English, Math, and Science. Dual-Credit, Internships, Credit by Exam may be substituted for requirements in appropriate areas; check with AESA administration for more information.

DISTINGUISHED DIPLOMA

AESA students are strongly encouraged to earn the Distinguished Diploma; in which students take a minimum of two dual credit courses or a long term project such as an internship. Further, students are required to participate in extra-curricular activities such as student government, speaking contests, debate, poetry-out-loud and life skills development.

COURSE AND GRADE INFORMATION

AESA courses are aligned by grade level; and aligned with the SAT and ACT objectives. AESA courses are based upon the standards of The National Council of Teachers of Mathematics, Next Generation Science Standards, The National Council of Teachers of English and The National Council for the School Studies. AESA courses are also NCAA approved.

AESA courses are rigorous and typically at the Honors level or higher. Students 9th - 12th grade sit for Fall and Spring final exams. Grades are based on a 4.0 GPA scale with no additional weight for Dual-credit courses. Students must earn a 70% or higher to receive credit for a course. AESA does not rank but does recognize the Valedictorian and Salutatorian.

AESA supports Seniors, Juniors and exceptional Sophomores and Freshmen, to distinguish themselves academically through dual-credit courses from The University of Texas at Austin, The University of California at Berkeley, and other notable colleges and universities.

DUAL CREDIT AT AESA

Dual-credit courses allow high school students to earn both high school and college credit by completing college-level coursework taught by university-approved instructors. AESA Prep Academy partners with prestigious institutions—including The University of Texas at Austin, the University of California at Berkeley, and Austin Community College—to offer high-quality dual-credit opportunities.

Students may also request approval to pursue dual-credit courses from other respected universities. With AESA's small class sizes and personalized support, students thrive in these rigorous academic environments.

Dual-credit courses appear on both high school and college transcripts, offering a head start on college while saving time and money. While AESA does not offer AP courses, our core curriculum meets or exceeds AP rigor. Juniors and Seniors are encouraged to take at least one dual-credit course, with many students taking multiple throughout high school.

NCAA ELIGIBILITY FOR STUDENT-ATHLETES

The National Collegiate Athletic Association (NCAA) oversees the eligibility process for high school student-athletes seeking athletic scholarships at Division I or Division II colleges and universities. No scholarship can be awarded without NCAA review and approval of the student's high school transcript.

AESA supports student-athletes in balancing academic excellence with athletic achievement. Students who intend to compete at the collegiate level are encouraged to become familiar with NCAA eligibility requirements as early as possible.

Students should register with the NCAA Eligibility Center (eligibilitycenter.org) by their junior year and request an official transcript to be sent from AESA to the NCAA Clearinghouse. Final approval is typically granted once the NCAA receives the student's final transcript after graduation.

The NCAA has specific course, grade, and standardized test score requirements for eligibility. Students should carefully review NCAA policies regarding the acceptance of non-traditional coursework such as summer school, CBEs, online learning platforms, or other credit recovery options. For the most current guidelines, visit the [NCAA Eligibility Center](#).

We strongly encourage AESA student-athletes and families to work closely with our academic advisors and college guidance team to ensure all NCAA academic requirements are met on time and with confidence.

THE COMMON APPLICATION (COMMON APP)

The Common Application is a centralized college application system used by more than 1,000 colleges and universities in the United States and internationally. It allows students to apply to multiple colleges through a single online platform, streamlining the college admissions process.

Students using the Common App complete one core application and submit it to participating institutions. Many colleges will require additional school-specific questions or supplemental essays, which are completed and submitted through the same system.

AESA students typically begin using the Common App during the summer before senior year. However, students and families are encouraged to explore the platform and familiarize themselves with its structure and requirements beginning in 10th or 11th grade.

Requirements of the Common App include:

- A personal essay (maximum 650 words)
- School forms and transcripts submitted by AESA academic advisors
- Letters of recommendation from AESA faculty

- Optional portfolios or resumes (depending on the college)
- College-specific supplemental questions or essays

The Common App opens each year on August 1. AESA's college advising team provides ongoing support to help students meet application deadlines, select appropriate colleges, and ensure all components are submitted accurately.

For more information, visit: www.commonapp.org

FAFSA – FREE APPLICATION FOR FEDERAL STUDENT AID

The Free Application for Federal Student Aid (FAFSA) is the primary form used to apply for federal, state, and institutional financial aid. Completing the FAFSA is strongly recommended for all college-bound students, regardless of income level.

The FAFSA provides access to:

- Federal grants (such as the Pell Grant)
- Federal student loans
- Work-study opportunities
- State-based and institutional aid
- Scholarship eligibility in some cases

CAREER & INTEREST EXPLORATION

At AESA Prep Academy, we believe discovering personal interests and aligning them with future goals is a vital part of a well-rounded high school education. To support this journey, students are encouraged to explore a variety of **free, high-quality career and college planning tools**.

These recommended resources include:

- [**Texas Career Check**](#)
A tool provided by the Texas Workforce Commission that allows students to explore career options, required education levels, expected salaries, and more.
- [**Texas Reality Check**](#)
Helps students estimate future living expenses and find careers that support their lifestyle choices through interactive budgeting and career planning tools.
- [**My Next Move \(O*NET Interest Profiler\)**](#)
Sponsored by the U.S. Department of Labor, this tool guides students through an interest profiler that connects them to careers they may enjoy and excel in.
- [**CareerOneStop**](#)
A robust federal resource offering career assessments, job outlook data, resume and job search tools, and pathways to credentials or certifications.
- [**BigFuture by College Board**](#)
Provides personalized college and career matches, scholarship opportunities, and guidance on how to plan for life after high school.

ALIGNMENT WITH NATIONAL STANDARDS

NOTE: By aligning with the following nationally respected standards, AESA ensures a consistent, high-quality education that supports student achievement, college preparedness, and career-readiness.

MATHEMATICS

Our mathematics curriculum aligns with the Principles and Standards for School Mathematics established by the National Council of Teachers of Mathematics (NCTM), promoting critical thinking, problem-solving, and mathematical reasoning skills.

SCIENCE

Our science courses adhere to the Next Generation Science Standards (NGSS), developed collaboratively by the National Science Teachers Association (NSTA). This alignment ensures students engage deeply in scientific inquiry, cross-disciplinary concepts, and real-world applications of scientific principles.

ENGLISH

The English curriculum meets the rigorous expectations set forth by the Standards for the English Language Arts, formulated by the National Council of Teachers of English (NCTE). This emphasizes proficiency in reading, writing, analytical thinking, communication, and literacy essential for college readiness.

SOCIAL STUDIES

Our social studies curriculum aligns with the National Curriculum Standards for Social Studies from the National Council for Social Studies (NCSS). This framework develops informed, responsible citizens through comprehensive study of history, geography, government, economics, and cultural studies.

PHYSICAL EDUCATION & HEALTH

Our Physical Education and Health curriculum is grade-level aligned and meets the National Physical Education and Health Standards, supported by the Society of Health and Physical

Educators (SHAPE America). The program emphasizes physical literacy, lifelong fitness habits, and health education relevant to today's youth.

VISUAL & PERFORMING ARTS

Our Art and Music curriculum aligns with the National Core Arts Standards (NCAS) and is supported by the National Coalition for Arts Standards. Instruction emphasizes artistic literacy, creativity, cultural understanding, and personal expression through sequential, standards-based learning.

PERSONAL FINANCE

Our Financial Life Skills Program adheres to the Next Gen Personal Finance (NGPF) Standards, a nationally recognized framework designed to equip students with essential financial knowledge and real-world money management skills. This alignment ensures students build lifelong financial capability through active learning in key areas such as budgeting, banking, credit, investing, taxes, insurance, and career planning.

BUSINESS EDUCATION

Our business and entrepreneurship courses align with the *National Standards for Business Education (NSBE)*, developed by the National Business Education Association (NBEA). These standards ensure students build essential competencies in business communication, marketing, accounting, entrepreneurship, personal finance, and management. The NSBE framework emphasizes real-world application, ethical decision-making, and career readiness, preparing students for success in both postsecondary education and the evolving global economy.

HIGH SCHOOL CORE ACADEMICS

HS MATHEMATICS

ALGEBRA 1

Grade Level(s): 8–9

Credit: 1 (Full Year)

This course builds foundational algebra skills and introduces students to mathematical modeling through real-world applications, critical thinking, and symbolic reasoning.

- Develops fluency with algebraic expressions, equations, and inequalities
- Explores functions and their representations through tables, graphs, and equations
- Solves linear equations and systems of equations in real-world contexts
- Introduces quadratic and exponential functions with practical applications
- Strengthens problem-solving, logical reasoning, and symbolic manipulation
- Emphasizes mathematical modeling and critical thinking across diverse problems
- Engages students in collaborative learning and performance-based assessments
- Prepares students for Geometry, Algebra II, and advanced STEM coursework

Prerequisite: None (typically taken in 9th grade; available to advanced 8th grade students)

GEOMETRY

Grade Level(s): 9–10

Credit: 1 (Full Year)

This course develops students' spatial reasoning, logical thinking, and analytical skills through the study of Euclidean geometry and an introduction to non-Euclidean concepts.

- Explores foundational geometric concepts including points, lines, planes, and angles
- Investigates congruence, similarity, and geometric transformations
- Strengthens logical reasoning through deductive proofs and geometric arguments
- Applies theorems to real-world and theoretical geometric problems
- Enhances spatial visualization and geometric modeling skills
- Introduces concepts from non-Euclidean geometry to expand mathematical perspective

- Emphasizes precision, reasoning, and communication in problem-solving
- Prepares students for Algebra II and further STEM coursework

Prerequisite: Algebra I

ALGEBRA 2

Grade Level(s): 10–11

Credit: 1 (Full Year)

This college preparatory course deepens students' understanding of algebraic thinking through advanced concepts and real-world mathematical modeling. Students explore a range of function types, their properties, and applications across scientific and financial contexts.

- Extends knowledge of linear, quadratic, exponential, and rational functions
- Introduces logarithmic, radical, and conic functions with real-world applications
- Models and solves complex equations using algebraic and graphical methods
- Investigates function transformations and inverse relationships
- Applies mathematical reasoning to population growth, radioactive decay, and compound interest
- Explores rational expressions, solving equations and inequalities algebraically and graphically
- Defines and analyzes conic sections including circles, parabolas, ellipses, and hyperbolas
- Emphasizes connections between abstract theory and practical modeling
- Prepares students for Pre-Calculus, Statistics, and college-level mathematics

Prerequisite: Geometry

PRE-CALCULUS

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course prepares students for college-level Calculus by integrating advanced topics in algebra, trigonometry, and analytic geometry. Emphasis is placed on mathematical reasoning, modeling, and foundational calculus concepts.

- Reinforces and extends skills from Algebra II and Geometry
- Solves systems of linear, quadratic, polynomial, and rational inequalities
- Applies exponential and logarithmic functions to model growth, decay, and prove identities
- Introduces polar coordinates and complex numbers using roots, powers, and

operations

- Analyzes conic sections including circles, ellipses, hyperbolas, and parabolas
- Uses matrices and vectors to model and solve real-world problems
- Investigates arithmetic and geometric sequences and series
- Explores limits of sequences, infinite series, and introduces power series
- Builds a conceptual foundation for Calculus through limit theorems and introductory derivatives

Prerequisite: Algebra II

CALCULUS 1 / DUAL-CREDIT CALCULUS 1

Grade Level(s): 11-12

Credit: 1 (Full Year)

This accelerated course is designed for students seeking advanced preparation for college-level mathematics or earning college credit through dual enrollment. Students gain a strong conceptual and practical understanding of differential and integral calculus.

- Introduces core concepts of limits, continuity, and the derivative
- Explores the application of derivatives in graphing, motion, and optimization problems
- Develops fluency with integral calculus and antiderivatives
- Examines the Fundamental Theorem of Calculus as a bridge between differentiation and integration
- Applies integration techniques to solve real-world problems, including volume calculations using solids of revolution
- Strengthens mathematical reasoning, analytical thinking, and academic readiness for STEM majors
- Offered as a Dual Credit option for eligible students pursuing college credit

Prerequisite: Pre-Calculus

Note: At least two dual credit courses are required for the **Distinguished Diploma**.

Calculus I is not required for the **Recommended Diploma**, but is strongly encouraged for students entering STEM fields.

CALCULUS 2 / DUAL-CREDIT CALCULUS 2

Grade Level(s): 12

Credit: 1 (Full Year)

This advanced course extends the study of calculus and is ideal for students pursuing college-level mathematics, engineering, or science. Offered as a dual credit option, it builds on Calculus I with a deeper exploration of integration, differential equations, and infinite series.

- Applies advanced techniques of integration across mathematical and real-world contexts
- Explores applications of integration including area, volume, and physical modeling
- Analyzes infinite sequences and series, including convergence and divergence
- Solves first-order and second-order ordinary differential equations
- Examines exact equations and systems of ODEs relevant to physics and engineering
- Develops Taylor and MacLaurin series and applies them to series solutions of differential equations
- Reinforces analytical thinking and prepares students for upper-level university STEM coursework

Prerequisite: Calculus I

Note: At least two dual credit courses are required for the **Distinguished Diploma**. **Calculus II is not required** for the **Recommended Diploma**, but is highly recommended for students pursuing advanced STEM fields.

STATISTICS

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course introduces students to foundational and applied statistical reasoning, equipping them with tools to interpret data, test hypotheses, and explore real-world applications in science, technology, and social inquiry.

- Builds a conceptual foundation through probability theory and random variables
- Covers data collection, sampling methods, and experimental design
- Teaches exploratory data analysis including distributions, graphs, and summary statistics
- Applies inferential methods such as point estimation, confidence intervals, and hypothesis testing
- Introduces linear regression and correlation analysis
- Incorporates hands-on coding and data visualization using the R programming language
- Bridges theory with practice, supporting real-world problem solving in science, business, and technology
- Develops critical thinking and data literacy skills relevant to college, careers, and research

Prerequisite: Algebra II (Pre-Calculus recommended for theoretical depth)

HS SCIENCES

BIOLOGY

Grade Level(s): 9–10

Credit: 1 (Full Year)

Biology is the scientific study of living organisms and their interactions with the environment. This foundational high school science course introduces core biological concepts and processes that form the basis of life and evolution.

- Examines cell structure, function, and processes including mitosis, osmosis, and membrane transport
- Explores DNA replication, protein synthesis, genetic inheritance, and biotechnology ethics
- Investigates photosynthesis, cellular respiration, ATP production, and energy flow
- Studies biological classification, plant structures, adaptations, and reproduction
- Analyzes community ecology, population dynamics, and ecosystem interactions
- Introduces principles of evolution and natural selection
- Reviews human body systems, immunity, and identifying diseases
- Encourages inquiry, data analysis, and critical thinking through labs and hands-on activities
- Prepares students for advanced coursework in Chemistry, Marine Biology, Environmental Science, and Anatomy & Physiology

Prerequisite: None

CHEMISTRY

Grade Level(s): 10–11

Credit: 1 (Full Year)

This course introduces the fundamental concepts of chemistry through hands-on lab experiences, inquiry-based learning, and real-world applications. Students build a strong foundation for college-level science while developing scientific reasoning and problem-solving skills.

- Applies the scientific method to explore matter, change, and chemical processes
- Examines atomic structure, electron configuration, and periodic trends
- Investigates chemical bonding, molecular structure, and nomenclature
- Studies gas laws, phase changes, and properties of solutions
- Balances chemical equations and performs stoichiometric calculations
- Explores reaction types, reaction rates, equilibrium, and acid-base chemistry
- Connects theoretical knowledge to real-world phenomena through laboratory experiments
- Reinforces quantitative reasoning and precise measurement skills

- Prepares students for advanced science courses such as Physics or Advanced Chemistry

Prerequisite: Biology

ADVANCED CHEMISTRY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course offers an in-depth exploration of chemical principles and real-world applications, building on foundational knowledge gained in Chemistry. Emphasizing multi-day laboratory investigations and complex problem-solving, students apply core concepts to advanced topics in modern chemistry.

- Deepens understanding of atomic structure, periodic trends, and radioactivity
- Analyzes chemical bonding, molecular geometry, and intermolecular forces
- Investigates gases, gas laws, states of matter, and phase equilibrium
- Explores stoichiometry, chemical reactions, and thermochemistry
- Examines reaction rates, equilibrium, and catalysts
- Studies acids, bases, salts, and oxidation-reduction reactions in detail
- Introduces carbon chemistry and fundamental organic chemistry concepts
- Conducts extended lab experiments to reinforce concepts and develop lab skills
- Prepares students for college-level chemistry or AP Chemistry and STEM-related fields

Prerequisite: Chemistry

PHYSICS

Grade Level(s): 11–12

Credit: 1 (Full Year)

This mathematically rigorous course introduces students to the fundamental principles of physics through problem-solving, laboratory experiments, and real-world applications. Designed to reflect college-level expectations, it provides a deep understanding of matter, energy, and the laws that govern physical systems.

- Explores motion in one and two dimensions, including velocity, acceleration, and projectile motion
- Applies vector analysis to study force, energy, momentum, and circular motion
- Investigates thermodynamics, including heat, work, and energy transformations
- Examines vibrations, waves, and sound phenomena
- Introduces electricity, electric fields, circuits, and magnetism
- Emphasizes measurement, calculations, and significant figures in problem-solving
- Engages students in laboratory experiments, demonstrations, and interactive simulations

- Strengthens mathematical reasoning and prepares students for college-level STEM courses

Prerequisite: Chemistry and Algebra II (may be taken concurrently)

ENVIRONMENTAL SCIENCE

Grade Level(s): 11–12

Credit: 1 (Full Year)

This interdisciplinary course introduces students to the scientific principles and practices used to understand Earth’s ecosystems and address environmental challenges. Emphasizing real-world application and sustainability, students explore how natural and human systems interact.

- Examines ecological principles, energy flow, and biodiversity within ecosystems
- Analyzes human impact on the environment, including pollution, climate change, and resource consumption
- Investigates environmental quality, conservation practices, and land and water use
- Explores plant systems, population dynamics, and sustainable development
- Integrates biology, chemistry, and earth science concepts with environmental problem-solving
- Encourages scientific inquiry through labs, data analysis, and case studies
- Evaluates risks, trade-offs, and policy options for addressing environmental issues
- Prepares students for college-level environmental science and global studies

Recommendation: Satisfactory completion of Biology 1 and Algebra 1

MARINE BIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course explores the physical, chemical, and biological characteristics of Earth’s oceans, emphasizing marine ecosystems and the interconnectedness of life. Students examine ocean science through hands-on study, ecological analysis, and discussions about environmental stewardship.

- Investigates the chemistry of seawater and the physical structure of ocean zones
- Studies marine algae, plant life, invertebrates, and vertebrates including fish, reptiles, birds, and mammals
- Examines microbial life and its essential role in ocean ecosystems
- Explores marine ecology, food webs, and biodiversity across various ocean habitats
- Analyzes human impact on ocean health, including pollution, climate change, and overfishing
- Reviews global ocean systems and the significance of sustainable fishing and

conservation efforts

- Encourages empathy for marine life and a deeper understanding of ocean preservation
- Prepares students for advanced study in marine science, environmental science, or ecology

Prerequisite: Biology

ANATOMY AND PHYSIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This advanced science course is part of AESA's Medical Pathway and is designed for students with an interest in healthcare, medicine, or biological sciences. Anatomy and Physiology provides a comprehensive exploration of the human body, emphasizing both the structure and function of major organ systems and their role in maintaining health and homeostasis.

- Covers all major body systems, including the circulatory, respiratory, nervous, skeletal, muscular, digestive, endocrine, and immune systems
- Explores the interdependence of body systems and how they respond to stress, illness, injury, and environmental factors
- Engages students through hands-on labs, dissections, 3D models, and real-world case studies
- Emphasizes accurate use of medical terminology and anatomical vocabulary
- Investigates diseases, disorders, and the body's mechanisms for healing and defense
- Promotes inquiry-based learning and critical thinking through diagnostic scenarios and lab-based problem-solving
- Strengthens scientific communication through technical writing, presentations, and collaborative investigations
- Provides an essential foundation for future studies in medicine, nursing, physical therapy, sports medicine, biomedical engineering, and related fields
- Builds student confidence with scientific equipment, lab procedures, and ethical considerations in health science

Prerequisite: Biology

HS ENGLISH LANGUAGE ARTS

ENGLISH I - ANALYSIS OF LITERATURE GENRES & ELEMENTS

Grade Level(s): 9

Credit: 1 (Full Year)

This introductory literature course builds foundational reading, writing, and analytical skills through the study of fiction, nonfiction, poetry, and drama from a range of cultures and time periods.

- Analyzes major literary genres and elements including theme, tone, and structure
- Strengthens close reading and textual interpretation using historical and cultural context
- Enhances vocabulary development, supporting PSAT readiness
- Develops writing proficiency through narrative, persuasive, expository, and research-based essays
- Builds grammar and punctuation skills through weekly instruction and practice
- Encourages critical thinking and discussion through Socratic seminars and text-based analysis
- Prepares students for advanced coursework in English and humanities

Prerequisite: None

ENGLISH II - SURVEY OF WORLD LITERATURE

Grade Level(s): 10

Credit: 1 (Full Year)

This course deepens literary analysis and persuasive writing skills through a global survey of literature. Students engage with texts from various time periods, cultures, and genres to develop critical thinking, research literacy, and academic writing proficiency.

- Explores fiction, memoir, informational texts, poetry, drama, and novels from diverse world perspectives
- Strengthens literary analysis with emphasis on author's purpose, cultural context, and genre conventions
- Develops structured writing through the full essay process: outlining, drafting, editing, and revising
- Builds vocabulary and reading comprehension skills in preparation for the SAT and ACT
- Reinforces grammar, mechanics, and usage through targeted instruction
- Introduces academic research practices, including how to find and cite peer-reviewed sources
- Teaches fundamentals of MLA formatting and literary criticism conventions

- Prepares students for college-level English, research writing, and AP-level analysis

Prerequisite: English I

ENGLISH III - AMERICAN LITERATURE

Grade Level(s): 11

Credit: 1 (Full Year)

This course offers a survey of American literature, exploring the nation's literary voice through diverse texts, cultural movements, and historical perspectives. Students build advanced writing and research skills while critically analyzing major works and themes in American literary tradition.

- Analyzes fiction, nonfiction, poetry, memoirs, and drama from various American authors and eras
- Examines themes of identity, freedom, and the American Dream across cultural and historical contexts
- Develops persuasive and literary analysis essays of 5–6 paragraphs with emphasis on clarity and argument
- Reinforces grammar, spelling strategies, and reading comprehension
- Expands vocabulary acquisition in preparation for the SAT and ACT
- Strengthens academic writing with deeper instruction in MLA formatting
- Introduces peer-reviewed source analysis and annotated bibliographies
- Prepares students for college-level research writing and English IV or Dual Credit English

Prerequisite: English II

ENGLISH IV - BRITISH LITERATURE

Grade Level(s): 12

Credit: 1 (Full Year)

This capstone English course surveys British literature across time, exploring how language, culture, and identity evolve through literary expression. Students engage in college-level reading, writing, and research to prepare for postsecondary academic success.

- Analyzes classic and contemporary British literature, including fiction, nonfiction, poetry, drama, and graphic novels
- Examines historical, cultural, and colonial influences on major literary movements and authors
- Develops persuasive and literary analysis essays of 7+ paragraphs with strong thesis development and textual support
- Refines grammar, advanced vocabulary, and reading comprehension in preparation for college entrance exams

- Practices advanced MLA formatting, in-text citation, and academic style
- Teaches best practices for sourcing, evaluating, and citing peer-reviewed research from scholarly databases
- Completes a college-level research assignment or literary analysis paper as a culminating project
- Strengthens critical thinking, argumentation, and academic writing for college readiness

Prerequisite: English III

HS SOCIAL STUDIES

WORLD GEOGRAPHY

Grade Level(s): 9

Credit: 1 (Full Year)

This course explores the relationships between people, places, and environments across the globe. Students examine how geography influences culture, population, economics, and global development through regional studies and thematic analysis.

- Investigates climate, topography, and natural resources and their impact on societies
- Analyzes patterns of population distribution, growth, and urbanization
- Explores cultural traditions, languages, and customs across world regions
- Examines economic productivity and resource consumption on a global scale
- Develops geographic literacy through map reading, spatial analysis, and comparative study
- Promotes global awareness and cross-cultural understanding
- Covers major world regions including the U.S., Canada, Latin America, the Caribbean, Europe, Asia, Africa, Australia, and Antarctica
- Prepares students for future coursework in World History and Global Studies

Prerequisite: None

WORLD HISTORY

Grade Level(s): 10

Credit: 1 (Full Year)

This course explores the evolution of global societies, cultural systems, and historical processes from ancient civilizations to the modern era. Students examine change, continuity, and global interconnectivity through key themes and comparative analysis.

- Investigates major turning points and transformative periods in global history
- Analyzes causes and consequences of political, economic, religious, and cultural shifts
- Develops skills in historical inquiry, document analysis, and evidence-based argumentation
- Highlights global interactions, trade networks, migrations, and technological advancements
- Examines themes such as power, conflict, belief systems, and human-environment interaction
- Encourages interpretation of diverse sources including maps, texts, artifacts, and primary documents
- Introduces historical periodization as an organizing framework

- Prepares students for advanced humanities coursework and dual-credit history courses

Prerequisite: World Geography

U.S. HISTORY

Grade Level(s): 11

Credit: 1 (Full Year)

This course provides a chronological survey of American history from 1877 through World War II, focusing on the political, economic, social, and cultural development of the United States as a democratic nation.

- Examines major events, movements, and turning points in U.S. history post-Reconstruction
- Analyzes the impact of industrialization, urbanization, and immigration on American society
- Explores key themes including civil rights, foreign policy, and the growth of federal power
- Highlights significant individuals, ideas, and institutions that shaped American democracy
- Incorporates geographic and historical thinking to better understand national development
- Emphasizes the use of primary sources, historical interpretation, and critical analysis
- Prepares students for Government, Economics, and college-level history coursework

Prerequisite: World History

U.S. GOVERNMENT

Grade Level(s): 12

Credit: 0.5 (One Semester)

This course offers students a comprehensive introduction to the foundations, structures, and functions of the United States government. Through critical thinking, discussion, and writing, students explore the principles of democracy, civic responsibility, and the evolving role of government in society.

- Examines the U.S. Constitution, the Bill of Rights, and landmark Supreme Court cases to understand the legal and philosophical underpinnings of American democracy
- Analyzes the roles and responsibilities of the three branches of government and their system of checks and balances
- Explores the functions of political parties, interest groups, the media, and the

electoral process in shaping public policy

- Encourages discussion of current events to connect historical principles with contemporary government issues
- Introduces methods for analyzing data, interpreting political trends, and evaluating public policy
- Promotes understanding of civil liberties, civil rights, and the balance between individual freedom and the common good
- Compares U.S. government systems to other global models to develop a broad civic and cultural perspective
- Develops advanced research, writing, and communication skills through argumentative essays, position papers, and collaborative projects
- Prepares students for civic life by fostering political literacy, community engagement, and awareness of their rights and responsibilities as citizens

Prerequisite: U.S. History

PRINCIPLES OF ECONOMICS

Grade Level(s): 12

Credit: 0.5 (Semester)

This course introduces students to the fundamentals of economics and the decision-making processes that shape individuals, businesses, and governments. Through engaging case studies, simulations, and real-world analysis, students will explore how economic systems function and how economic policies impact societies at local, national, and global levels.

- Explores basic economic concepts such as scarcity, opportunity cost, and the factors of production
- Analyzes supply and demand models, price equilibrium, and the behavior of consumers and firms
- Examines the structure and function of markets, including competition, monopolies, and mixed economies
- Investigates the role of government in regulating markets, managing resources, and promoting economic stability
- Covers key components of macroeconomics, including GDP, inflation, unemployment, and fiscal and monetary policy
- Introduces students to banking systems, interest rates, the Federal Reserve, and the global economy
- Encourages evaluation of current events and economic policies through the lens of micro- and macroeconomic principles
- Promotes analytical thinking through interpreting economic graphs, models, and indicators
- Develops essential skills in research, data analysis, and argument-based writing
- Provides students with practical tools to make informed financial and civic decisions in the real world

Prerequisite: U.S. History

HIGH SCHOOL GLOBAL LANGUAGES

HS SPANISH

HS SPANISH 1

Grade Level(s): 9–12

Credit: 1 (Full Year)

This engaging introductory course develops students' foundational skills in Spanish through immersive, interactive instruction. Students explore culture and communication while building vocabulary and grammar proficiency across real-world themes.

- Builds skills in listening, speaking, reading, and writing in Spanish
- Introduces thematic vocabulary and essential grammar structures
- Develops comprehension through multimedia, dialogues, and reading exercises
- Encourages spontaneous use of Spanish through skits, conversations, and creative projects
- Engages students in cultural comparisons of Spanish-speaking countries
- Reinforces language learning through games, technology, and peer collaboration
- Emphasizes practical communication and situational fluency in everyday settings
- Aligns with national ACTFL (American Council on the Teaching of Foreign Languages) standards

Prerequisite: None

HS SPANISH 2

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course builds on the foundation of Spanish I, deepening students' proficiency in vocabulary, grammar, and cultural awareness. Through interactive, creative, and tech-integrated lessons, students continue developing their ability to communicate effectively in Spanish.

- Strengthens listening, speaking, reading, and writing skills through authentic language use
- Expands vocabulary and grammar with new thematic units and complex sentence structures
- Encourages real-world communication through skits, plays, and multimedia projects
- Engages students in reading and listening comprehension activities using diverse sources
- Promotes cultural understanding through the study of Spanish-speaking countries and their customs

- Encourages conversational fluency through paired and group speaking tasks
- Reinforces grammar through contextualized practice and interactive activities
- Aligns with ACTFL national standards for second-language acquisition

Prerequisite: Spanish I

HS SPANISH 3

Grade Level(s): 10–12

Credit: 1 (Full Year)

This course focuses on building fluency and confidence in spoken Spanish through immersive communication and cultural exploration. Students commit to using only Spanish during class and actively collaborate with peers to create meaningful, real-world language experiences.

- Strengthens fluency and spontaneity in conversation through full immersion classroom expectations
- Expands vocabulary and grammar in the context of authentic cultural themes and traditions
- Explores literature, storytelling, and heritage from Spanish-speaking countries
- Engages in creative projects such as short films, skits, and reenactments of cultural stories
- Encourages original content creation that reinforces cultural understanding and language mastery
- Promotes deeper intercultural awareness through comparisons of global Spanish-speaking communities
- Reinforces reading, writing, listening, and speaking with a focus on real-life application
- Aligns with ACTFL national standards for advanced second-language acquisition

Prerequisite: Spanish II

HS SPANISH 4

Grade Level(s): 11–12

Credit: 1 (Full Year)

This advanced course is designed for highly proficient Spanish students seeking to refine their fluency and literacy in the language. Offered by request, the course is tailored to individual student goals and emphasizes advanced conversation, composition, and cultural analysis.

- Develops high-level conversational skills in academic and real-world contexts
- Strengthens advanced writing skills through essays, reflections, and literary analysis
- Engages with authentic texts, films, and articles from across the Spanish-speaking world

- Explores advanced grammar and syntax through context-based application
- Provides individualized instruction to support student interests in culture, literature, or career-specific language use
- Prepares students for college-level Spanish, or international travel and study
- Encourages leadership in Spanish through mentoring, modeling, or project creation

Prerequisite: Spanish III

Note: This course is available by request and may be customized based on student proficiency and interest.

HS FRENCH

HS FRENCH 1

Grade Level(s): 9–12

Credit: 1 (Full Year)

This engaging and interactive course introduces high school students to the French language and Francophone cultures. Designed for beginners, French I develops essential communication skills across listening, speaking, reading, and writing, while immersing students in the global diversity of French-speaking communities.

- Introduces fundamental vocabulary themes, pronunciation, and core grammar concepts in every unit
- Emphasizes real-world application through context-rich lessons and everyday conversational practice
- Builds listening and reading comprehension through multimedia content, dialogues, and authentic texts
- Strengthens speaking and writing skills through guided practice, short responses, storytelling, and simple presentations
- Explores cultural traditions, holidays, social norms, and historical contributions from French-speaking countries around the world
- Encourages interpersonal communication through in-class conversations, roleplays, and group activities
- Develops cross-cultural awareness and respect for linguistic diversity
- Incorporates technology and multimedia tools to enhance language acquisition and engagement
- Provides regular formative and summative assessments to track student progress and build mastery
- Aligns with national standards set by ACTFL (American Council on the Teaching of Foreign Languages), emphasizing interpretive, interpersonal, and presentational modes of communication

Prerequisite: None

HS FRENCH 2

Grade Level(s): 9–12

Credit: 1 (Full Year)

French II builds on the foundational skills developed in French I, with increased emphasis on communication, vocabulary expansion, grammatical accuracy, and cultural exploration. This course deepens students' ability to express themselves in real-world situations, while strengthening their understanding of Francophone cultures across the globe.

- Reinforces and expands vocabulary and grammar structures introduced in French I
- Enhances listening and reading comprehension through longer texts, authentic videos, and interactive dialogues
- Promotes greater fluency and accuracy in speaking and writing through extended conversations, narratives, and guided compositions
- Teaches students to express preferences, describe past events, and ask and answer questions in various tenses
- Builds confidence through thematic units such as food, travel, shopping, school life, family, and leisure activities
- Develops cultural competency by exploring music, art, history, geography, and current events in French-speaking countries
- Introduces more complex sentence structures, idiomatic expressions, and functional language for navigating common social and transactional settings
- Encourages collaborative projects and cultural comparisons to foster empathy and global awareness
- Incorporates ACTFL-aligned instructional practices, supporting growth in interpretive, interpersonal, and presentational communication
- Includes regular assessments and performance-based tasks to monitor progress and prepare students for upper-level coursework

Prerequisite: French I or equivalent experience

HS FRENCH 3

Grade Level(s): 10–12

Credit: 1 (Full Year)

French III challenges students to further develop their fluency and proficiency in all four domains of language learning—listening, speaking, reading, and writing—while engaging more deeply with the cultures, histories, and perspectives of the French-speaking world. Students will communicate more confidently and accurately in a range of real-life contexts, using multiple verb tenses and nuanced vocabulary.

- Expands vocabulary related to travel, health, relationships, current events, careers, and daily life
- Strengthens grammatical skills through mastery of past, future, conditional, and subjunctive tenses
- Encourages students to express opinions, narrate events, and defend arguments in writing and conversation
- Improves comprehension through authentic texts, news articles, music, and excerpts from literature
- Promotes real-time conversation and storytelling through roleplays, presentations, and interpersonal tasks
- Explores social, political, and cultural themes in Francophone countries across Europe, Africa, the Caribbean, and North America
- Integrates digital tools, media, and collaborative projects to support learning and global awareness

- Emphasizes ACTFL-aligned communication standards in interpretive, interpersonal, and presentational modes
- Builds cultural appreciation and critical thinking through comparative analyses of customs, values, and artistic contributions
- Prepares students for DC level coursework, study abroad, or practical use of French in academic and professional settings

Prerequisite: French II or equivalent experience

HS FRENCH 4

Grade Level(s): 11–12

Credit: 1 (Full Year)

French IV is an advanced course focused on refining fluency, expanding cultural literacy, and cultivating the analytical and interpretive skills needed for college-level study or real-world language use. Students engage in meaningful discussions, write with clarity and nuance, and explore sophisticated texts and topics that span history, literature, politics, and the arts.

- Emphasizes precision and fluency in speaking and writing through sustained conversation, debates, essays, and presentations
- Explores Francophone literature, short stories, film, music, and media with a focus on interpretation, critique, and cultural context
- Strengthens advanced grammar, including compound verb tenses, the subjunctive mood, complex pronoun use, and advanced syntax
- Encourages students to analyze cultural identity, global issues, and societal values in the French-speaking world
- Builds vocabulary through real-world themes such as global citizenship, technology, the environment, social justice, and travel
- Develops listening and reading comprehension through authentic materials such as news articles, podcasts, film, and literature
- Integrates ACTFL-aligned presentational and interpersonal communication standards
- Provides opportunities for students to complete independent research, multimedia projects, and cultural presentations
- Prepares students for university-level French courses, language proficiency exams, or international travel and exchange programs
- Fosters confident, culturally aware communicators capable of engaging meaningfully in a global society

Prerequisite: French III or equivalent experience

HIGH SCHOOL ELECTIVES

HS COMMUNICATIONS ELECTIVES

DEBATE I

Grade Level(s): 9-12

Credit: .5 (One Semester)

This foundational course introduces students to the art of public speaking, argumentation, and formal debate. Students gain confidence as they develop critical thinking, persuasive communication, and research skills through daily speaking opportunities and real-time debates.

- Develops foundational public speaking and debate techniques
- Introduces rhetorical strategies including Aristotle's ethos, pathos, and logos
- Explores debate formats such as Philosophical Chairs, Lincoln-Douglas, and Public Forum
- Strengthens skills in case writing, rebuttal, cross-examination, and impromptu speaking
- Encourages awareness of current events, social issues, and political philosophy
- Fosters authentic voice, leadership, and confident expression in a supportive environment

Prerequisite: None

Recommended for: 11th and 12th grade students

DEBATE II

Grade Level(s): 10–12

Credit: .5 (One Semester)

Designed for returning students, this advanced course deepens analytical and performance-based debate skills. Students take on more complex issues and hone their technique through rigorous preparation, real-world simulations, and mentorship roles.

- Refines argument structure, logic, and rhetorical finesse
- Engages in advanced debate topics including ethics, global affairs, and constitutional issues
- Leads peer feedback and collaborative critique sessions
- Expands use of debate formats and sharpens timed responses and rebuttals
- Encourages synthesis of moral, political, and philosophical reasoning
- Prepares students for competitive debate and real-world applications of discourse

Prerequisite: Debate I or instructor approval

Recommended for: 11th and 12th grade students

DEBATE TEAM

Grade Level(s): 9–12

Credit: .5 (One Semester)

The Debate Team is a performance-based course for experienced debaters representing AESA in public speaking events, school exhibitions, or competitions. Students engage in high-level argumentation, current event analysis, and team strategy while modeling excellence in public discourse.

- Practices advanced speaking skills through internal scrimmages and live exhibitions
- Focuses on debate leadership, coaching peers, and team-based case development
- Engages deeply with political theory, ethics, and global current events
- Designs and participates in debates for school-wide or public audiences
- Enhances research skills and persuasive writing across debate formats
- Cultivates grace, charisma, and confidence in high-stakes speaking situations

Prerequisite: Debate II or instructor approval

SPEECH I

Grade Level(s): 9–12

Credit: .5 (One Semester)

This introductory course equips students with essential public speaking skills, teaching them how to write, deliver, and refine speeches across a variety of settings. Through immersive activities, students gain confidence, presence, and the ability to engage any audience with clarity and purpose.

- Teaches strategies for conquering stage fright and building stage presence
- Focuses on speech writing, outlining, and delivery for informative and persuasive content
- Explores techniques such as body language, humor, and storytelling
- Includes practice with expository, impromptu, motivational, and comedic speeches
- Analyzes public speaking through video examples and peer critique
- Encourages personal expression and effective communication in formal and informal settings
- Grades based on participation, effort, and progress from initial to final presentation

Prerequisite: None

Recommended for: 11th and 12th grade students

SPEECH II

Grade Level(s): 10–12

Credit: .5 (One Semester)

Speech II builds upon the foundational skills of Speech I, advancing students' abilities in speech composition, rhetorical strategy, and audience engagement. This course offers deeper practice in professional and creative speaking formats.

- Refines voice control, timing, and storytelling techniques
- Introduces advanced rhetorical devices and persuasive strategies
- Explores speaking for specific audiences, occasions, and professional contexts
- Encourages leadership in classroom presentations, panel discussions, and event hosting
- Expands use of impromptu and extemporaneous speech formats
- Provides mentorship and feedback opportunities within a supportive peer community
- Continues use of video modeling and real-world speaker analysis

Prerequisite: Speech I

Recommended for: 11th and 12th grade students

BUSINESS COMMUNICATION

Grade Level(s): 9–12

Credit: .5 (One Semester)

This course equips students with essential communication skills for success in academic, professional, and entrepreneurial settings. Students will build confidence and proficiency in oral, written, and digital communication while developing key workplace competencies such as professionalism, collaboration, and leadership.

- Builds written communication skills through business emails, memos, letters, résumés, and cover letters
- Develops public speaking and presentation strategies using professional tone, nonverbal language, and visual aids
- Strengthens active listening, collaboration, and problem-solving through team-based activities and meeting simulations
- Emphasizes professional etiquette, cultural awareness, and communication styles in both domestic and international business contexts
- Prepares students for the job market with mock interviews, networking techniques, and personal branding strategies

- Introduces digital communication tools and explores the role of social media, professional networking, and online presence in business
- Engages students in self-assessment and career exploration based on personal interests and industry research
- Connects classroom learning to real-world application through guest speakers, local entrepreneur panels, and workplace scenarios
- Encourages reflection and growth by providing students with ongoing feedback on both individual and group communication performance
- This course is ideal for students interested in careers in business, marketing, entrepreneurship, law, leadership, or any field where clear and effective communication is key.

Prerequisite: None

HS ENGLISH ELECTIVES

CREATIVE WRITING PLUS

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course introduces students to the craft of imaginative writing across multiple genres, including fiction, poetry, creative nonfiction, spoken word, and journalism. Students explore storytelling techniques by studying masterworks and applying those tools to develop polished, original writing.

- Explores craft elements such as structure, voice, pacing, and narrative design
- Engages with texts across written, audio, and visual formats—from Shakespeare to Star Wars
- Strengthens writing through peer workshops, feedback sessions, and revision cycles
- Develops storytelling in fiction, memoir, poetry, screenwriting, and experimental forms
- Builds analytical skills through the study of published authors and multimedia narratives
- Supports publishing experience through contributions to *The Aussie*, AESA’s student magazine
- Provides journalism training in interviewing, editorial writing, proofreading, and layout design
- Introduces professional tools including Adobe InDesign for magazine formatting and production

Prerequisite: None (Strong interest in creative expression recommended)

ADVANCED CREATIVE WRITING

Grade Level(s): 10–12

Credit: 1 (Full Year)

This course offers experienced writers the opportunity to refine their voice, expand their creative range, and produce high-quality, publication-ready work. Through intensive workshops, advanced analysis, and independent projects, students will deepen their craft and artistic identity.

- Builds on techniques introduced in Creative Writing with increased complexity and polish
- Provides regular workshops for feedback, revision, and peer critique
- Explores advanced narrative structure, experimental forms, and thematic development
- Encourages publication through *The Aussie* and external contests or submissions

- Supports student-led projects and genre-specific deep dives (e.g., playwriting, satire, memoir)
- Enhances literary analysis through close reading of masterworks across genres
- Reinforces habits of revision, collaboration, and creative risk-taking
- Fosters a supportive writing community and prepares students for college-level writing portfolios

Prerequisite: Creative Writing Plus (exceptions with instructor approval)

HS FINE ARTS ELECTIVE

INTRODUCTION TO VISUAL ARTS

Grade Level(s): 9–12

Credit: 1 (Full Year)

This foundational high school course offers a dynamic survey of visual arts through hands-on exploration of both two-dimensional and three-dimensional media. Students build technical skills, creative confidence, and artistic voice while producing original, meaningful work.

- Explores a variety of 2D media including charcoal, oil pastels, colored pencils, ink, and soft pastels
- Introduces 3D media and sculptural forms with attention to structure and form
- Develops technical drawing skills, material handling, and visual storytelling
- Builds toward a self-directed spring project with a cohesive theme and formal presentation
- Encourages critical thinking through written and verbal critique and defense of artistic choices
- Examines contemporary and historical themes in art through research and analysis
- Cultivates an understanding of visual language, composition, and creative problem-solving
- Prepares students for advanced visual art coursework and portfolio development

Prerequisite: None

ADVANCED STUDIO ART

Grade Level(s): 10–12 (*Instructor approval required*)

Credit: 1 (Full Year)

This high school course is designed for advanced visual arts students who are ready to pursue individualized, in-depth studio work and portfolio development. Ideal for students considering a career in the arts or college-level study, this course emphasizes personal voice, mastery of media, and critical engagement with artistic traditions.

- Produces a refined art portfolio of at least 10 original, high-quality works per semester
- Explores advanced techniques across 2D and 3D media, guided by a unifying personal theme
- Maintains a sketchbook or journal for idea generation, planning, and reflection
- Prepares for exhibitions, competitions, and potential college or scholarship submissions
- Includes study of historical and contemporary art styles, movements, and influential artists
- Engages in critiques and artist talks to develop visual literacy and articulate creative intent
- Completes a formal written piece for inclusion in a cross-curricular writing portfolio
- Encourages independent exploration and project-based learning in a studio setting

Prerequisite: Introduction to Visual Arts or equivalent; instructor approval required

DIGITAL PHOTOGRAPHY

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course introduces students to digital photography as a creative art form and a tool for visual storytelling. Students learn foundational camera techniques, design principles, and digital editing, using photography to explore both artistic expression and personal branding.

- Teaches basic functions of digital cameras, image composition, and photographic techniques
- Applies elements of art and principles of design to photographic projects
- Develops skills in editing software and mobile photo editing applications
- Encourages visual storytelling through photo series, creative challenges, and thematic portfolios
- Introduces blogging and digital portfolio creation to showcase student work
- Explores self-promotion, visual identity, and social media marketing strategies
- Encourages participation in art exhibitions and photography competitions
- Strengthens digital literacy and visual communication through technical and creative problem-solving

Equipment Requirement: Students must have a digital camera (basic point-and-shoot), charger, laptop with editing software, and a memory card.

Prerequisite: None

DIGITAL MEDIA, MARKETING AND BRANDING

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This dynamic course introduces students to the intersection of media arts, digital communication, and modern marketing strategies. Designed for aspiring creatives, entrepreneurs, or future media professionals, the course blends technical skill development with an understanding of branding, storytelling, and audience engagement.

- Explores the foundations of brand identity, brand voice, and visual consistency across platforms
- Teaches the use of digital tools for graphic design, video editing, content creation, and social media management
- Introduces key marketing concepts such as audience segmentation, campaign strategy, and digital advertising
- Encourages visual storytelling as a marketing tool to build emotional connections and influence perception
- Examines the role of media in shaping public opinion, driving trends, and reinforcing brand awareness
- Promotes ethical media usage, including responsible messaging and inclusive representation
- Incorporates real-world applications through project-based learning, such as designing logos, social media graphics, or video advertisements

- Guides students in developing complete branding strategies for hypothetical businesses or local community projects
- Fosters collaboration, innovation, and critical thinking in creative marketing contexts
- Students will leave the course with a portfolio of media-rich marketing materials and a deeper understanding of how design, messaging, and media combine to build impactful brands.

Prerequisite: None

FILM STUDIES

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course introduces students to the language, history, and art of cinema. By exploring narrative structure, visual storytelling, and film theory, students will learn how to critically analyze films as cultural texts and creative expressions.

- Teaches core film concepts including mise-en-scène, cinematography, editing, and sound design
- Analyzes authorship, genre conventions, and the visual language of storytelling
- Examines the evolution of film as an art form, including major movements and historical context
- Develops visual literacy through close reading and discussion of classic and contemporary films
- Encourages students to produce and edit short films to apply learned techniques
- Builds understanding of how character, setting, and theme are constructed through sight and sound
- Explores film criticism and theory to foster deeper engagement and appreciation
- Supports creativity, collaboration, and storytelling through hands-on projects and peer review

Technology Requirement:

Students must have access to a smartphone or camera with recording capabilities and a laptop with video editing software (e.g., iMovie, DaVinci Resolve, Final Cut Pro, Adobe Premiere).

Prerequisite: None

INTRODUCTION TO MUSIC

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This course offers students an engaging introduction to the fundamentals of music theory, musical expression, and literacy. Designed for both beginners and those with limited musical background, it explores the structure and language of music through active participation and hands-on learning.

- Covers essential music theory topics including pitch, rhythm, scales, intervals, harmony, and form
- Introduces music notation, reading skills, and vocabulary to build musical literacy
- Reinforces theory through practical exercises such as singing intervals and melodies, composing short pieces, and playing on keyboards or classroom instruments
- Develops critical listening skills to identify stylistic elements, instrumentation, and musical form
- Encourages creativity and expression through collaborative and individual musical projects
- Explores the historical and cultural evolution of music from various time periods and global traditions

- Examines music's role in storytelling, ceremony, identity, and social change
- Builds appreciation for diverse musical genres including classical, folk, jazz, popular, and world music
- Promotes cross-cultural understanding and an appreciation of music as a universal language
- This course provides a strong foundation for future study in music performance, theory, or appreciation. It also supports student growth in creativity, collaboration, and cultural awareness.

Prerequisite: None

GENERAL SCIENCE ELECTIVES

ZOOLOGY

Grade Level(s): 10–12

Credit: 1 (Full Year)

Zoology is an advanced life science course designed for students interested in animal biology, veterinary medicine, and related fields. As a foundational course in the **Veterinary Science Pathway**, Zoology offers an in-depth study of animal structure, function, classification, and behavior. Students will explore the diversity of the animal kingdom—from invertebrates to complex vertebrates—through both theoretical and hands-on learning experiences.

- Examines major animal phyla and their anatomical and physiological characteristics
- Investigates animal development, reproduction, adaptation, and behavior
- Analyzes ecological relationships, habitats, and biodiversity
- Emphasizes dissection and comparative anatomy to understand body systems
- Introduces topics in animal health, disease prevention, and the role of veterinary science
- Discusses ethical considerations in animal research, care, and conservation
- Engages students in scientific inquiry through labs, field observations, and real-world case studies
- Promotes critical thinking, research, and presentation skills through individual and collaborative projects
- Connects course content to careers in veterinary science, wildlife biology, animal husbandry, and zoological research
- Students will leave the course with a solid foundation in animal biology and a clearer understanding of animal-related career pathways. This course is ideal for students preparing for further studies in biology, animal science, veterinary technology, or related disciplines.

Prerequisite: Biology (or concurrently)

MARINE BIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course explores the physical, chemical, and biological characteristics of Earth's oceans, emphasizing marine ecosystems and the interconnectedness of life. Students examine ocean science through hands-on study, ecological analysis, and discussions about environmental stewardship.

- Investigates the chemistry of seawater and the physical structure of ocean zones
- Studies marine algae, plant life, invertebrates, and vertebrates including fish,

reptiles, birds, and mammals

- Examines microbial life and its essential role in ocean ecosystems
- Explores marine ecology, food webs, and biodiversity across various ocean habitats
- Analyzes human impact on ocean health, including pollution, climate change, and overfishing
- Reviews global ocean systems and the significance of sustainable fishing and conservation efforts
- Encourages empathy for marine life and a deeper understanding of ocean preservation
- Prepares students for advanced study in marine science, environmental science, or ecology

Prerequisite: Biology

MEDICAL MICROBIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This advanced science course is part of **AESA's Medical Pathway** and is designed for students with an interest in healthcare, medicine, or biological sciences. This course provides an introduction to microbiology and immunology, focusing on the biology of disease-causing microorganisms and the body's immune response. Designed for students interested in health sciences, the course blends scientific theory with practical lab experience.

- Studies major classes of microbes including bacteria, viruses, fungi, and parasites
- Covers microbial structure, function, and classification
- Examines disease transmission, pathogenesis, and epidemiology
- Explores the immune system's defense mechanisms and immunological responses
- Introduces principles of disease control, prevention, and treatment
- Conducts laboratory investigations to reinforce concepts and develop research skills
- Supports career readiness in medical, pharmaceutical, nursing, and allied health fields

Prerequisite: Biology and Chemistry

ANATOMY AND PHYSIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This advanced science course is part of **AESA's Medical Pathway** and is designed for students with an interest in healthcare, medicine, or biological sciences. Anatomy and Physiology provides a comprehensive exploration of the human body, emphasizing both the structure and function of major organ systems and their role in maintaining health and homeostasis.

- Covers all major body systems, including the circulatory, respiratory, nervous, skeletal, muscular, digestive, endocrine, and immune systems
- Explores the interdependence of body systems and how they respond to stress, illness, injury, and environmental factors
- Engages students through hands-on labs, dissections, 3D models, and real-world case studies
- Emphasizes accurate use of medical terminology and anatomical vocabulary
- Investigates diseases, disorders, and the body's mechanisms for healing and defense
- Promotes inquiry-based learning and critical thinking through diagnostic scenarios and lab-based problem-solving
- Strengthens scientific communication through technical writing, presentations, and collaborative investigations
- Provides an essential foundation for future studies in medicine, nursing, physical therapy, sports medicine, biomedical engineering, and related fields
- Builds student confidence with scientific equipment, lab procedures, and ethical considerations in health science

Prerequisite: Biology

MEDICAL TERMINOLOGY

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

Medical Terminology offers students a foundational introduction to the language of healthcare and is a core component of the **AESA Medical Pathway**. This course prepares students for future studies in anatomy, health science, or medical careers by building confidence in understanding and using medical vocabulary across a wide range of health disciplines.

- Teaches students how to analyze and construct medical terms using roots, prefixes, and suffixes
- Introduces terminology related to human anatomy, physiology, diseases, diagnostic tools, and medical procedures
- Covers vocabulary used in various healthcare specialties such as cardiology, dermatology, neurology, and pediatrics
- Builds proficiency in reading, interpreting, and communicating medical information accurately and effectively
- Reinforces learning through interactive exercises, quizzes, flashcards, and real-world scenarios
- Supports interdisciplinary connections with science, biology, and health education
- Enhances college and career readiness for students interested in nursing, medicine, veterinary science, physical therapy, and other healthcare fields
- Fosters critical thinking and attention to detail in decoding complex terms and medical documentation
- By the end of the course, students will have developed a strong working knowledge

of medical terminology that serves as a gateway to more advanced medical coursework and professional communication in clinical settings.

Prerequisite: None

PSYCHOLOGY

Grade Level(s): 10–12

Credit: 0.5 (One Semester)

This introductory course offers a broad overview of the field of psychology, guiding students through the major theories, research methods, and real-world applications that explain human behavior and mental processes.

- Surveys key psychological approaches from Freud to modern neuroscience
- Explores foundational topics including learning, memory, emotions, and motivation
- Examines brain structure, neural communication, and behavioral genetics
- Discusses development across the lifespan, perception, and consciousness
- Investigates psychological disorders and treatment approaches
- Analyzes social identity, group dynamics, and cross-cultural behavior
- Encourages students to evaluate psychological research and apply findings to everyday life
- Builds critical thinking, self-awareness, and insight into interpersonal interactions

Prerequisite: None

PHYSICAL EDUCATION & HEALTH ELECTIVES

PHYSICAL EDUCATION

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course promotes lifelong health, fitness, and personal well-being through structured physical activity and student-centered engagement. Rooted in the belief that enjoyment and consistency are the foundations of long-term physical health, Physical Education at AESA prioritizes both skill development and positive physical habits.

- Introduces and reinforces fundamental movement skills and sport-specific techniques
- Develops aerobic fitness, muscular strength, flexibility, and endurance through varied activities
- Encourages personal goal setting, self-assessment, and growth-oriented reflection
- Incorporates individual and team sports to promote cooperation, communication, and sportsmanship
- Supports mental wellness through physical activity as a form of stress relief and self-care
- Emphasizes the connection between regular physical activity and a balanced, healthy lifestyle
- Builds knowledge of fitness principles, body mechanics, and injury prevention
- Teaches students to value physical activity and understand its long-term benefits
- Grading is based on participation, personal effort, conduct, and demonstrated commitment to improvement
- The ultimate goal of this course is to develop physically literate individuals—students who have the knowledge, skills, and confidence to engage in healthful physical activity throughout their lives.

Note: Students may take Physical Education for up to three years toward graduation requirements.

HIGH SCHOOL SPORTS & ATHLETICS

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course is designed for students who are active participants in AESA's competitive team sports programs, including flag football, basketball, soccer, volleyball, and track.

Students will engage in structured athletic training that emphasizes teamwork, skill development, and physical conditioning.

- Includes participation in team practices, scrimmages, and organized competitions
- Focuses on individual skill-building, sport-specific drills, and game strategies
- Emphasizes cardiovascular fitness, strength training, flexibility, and injury prevention
- Encourages personal responsibility, discipline, and a growth mindset both on and off the field
- Reinforces sportsmanship, leadership, and effective communication in team environments
- Promotes lifelong healthy habits through physical activity and wellness education
- Offers opportunities for students to set performance goals and track personal progress
- Supports student-athletes in balancing academics with their athletic commitments
- May include seasonal or year-round participation depending on sport and scheduling

Prerequisite: None

YOGA: INTRODUCTION & PRACTICE

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This course introduces students to the foundational principles and practices of yoga, combining physical movement with mindfulness and intentional breathwork. Through regular practice, students will enhance their physical fitness, reduce stress, and cultivate inner focus.

- Teaches fundamental yoga poses with a focus on strength, balance, and flexibility
- Emphasizes mindful movement, deep breathing, and body awareness
- Enhances posture, core strength, and coordination through progressive sequences
- Incorporates guided meditation and relaxation techniques in each session
- Encourages stress management, self-care, and emotional regulation
- Fosters a calm, inclusive environment where students build confidence and presence
- Supports lifelong wellness habits through non-competitive, restorative physical activity

Materials: Yoga mats are available; students are encouraged to bring their own

HEALTH

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course empowers students to make informed, health-enhancing decisions that support personal well-being and lifelong wellness. Through real-world application and critical thinking, students explore mental, emotional, physical, and social health.

- Teaches students how to access and evaluate valid, reliable health information
- Builds decision-making, goal-setting, and communication skills through real-life scenarios
- Explores topics including emotional health, stress management, nutrition, and physical wellness
- Analyzes the impact of family, peers, culture, and media on health behaviors
- Includes reflection on personal choices and strategies for improving individual and community health
- Incorporates documentaries and multimedia resources to deepen engagement and understanding
- Prepares students to manage health challenges and advocate for wellness in all aspects of life

Prerequisite: None

HS TECHNOLOGY ELECTIVES

COMPUTER SCIENCE

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course introduces students to foundational concepts in computer science, preparing them to think critically about how technology shapes the world. Designed to be rigorous and accessible, Computer Science combines hands-on programming experience with exploration of real-world applications in computing, digital systems, and information processing.

- Introduces core computing principles, including algorithms, programming, data analysis, and the societal impact of technology
- Provides hands-on experience with HTML and JavaScript to build functional web pages and interactive applications
- Encourages creativity, collaboration, and logical reasoning through project-based learning and group activities
- Develops foundational skills in problem-solving, debugging, and computational thinking
- Explores data representation, internet safety and protocols, and cybersecurity fundamentals
- Reinforces digital literacy, ethical use of technology, and responsible online behavior
- Includes a variety of assessments such as coding challenges, design projects, and reflection activities
- Prepares students for further study in computer science, engineering, robotics, and other STEM fields
- This course is ideal for students interested in exploring programming, software development, or technology-related careers. No prior coding experience is required.

Prerequisite: None

COMPETITIVE ROBOTICS & ENGINEERING SYSTEMS

Grade Level(s): 9–12

Credit: 1 (Full Year)

This hands-on course immerses students in the world of robotics, engineering design, and real-time problem solving through team-based challenges and competitions. Students will apply foundational concepts in mechanical systems, coding, and design thinking as they build and program their own robots to complete increasingly complex tasks.

- Introduces mechanical and electronic systems including motors, sensors, and controllers
- Builds programming fluency through visual coding platforms and Python
- Emphasizes engineering principles, design iteration, and troubleshooting techniques
- Cultivates teamwork, leadership, and collaboration through group build challenges
- Explores real-world robotics applications in manufacturing, medicine, and exploration
- Incorporates robotics competitions with timed challenges, obstacle courses, and autonomous missions
- Strengthens critical thinking, creativity, and resilience through iterative learning
- Includes assessments such as engineering notebooks, coding tasks, and competition performance

This course is ideal for students who are curious about engineering, enjoy working on hands-on projects, and thrive in a collaborative and competitive environment. It prepares students for participation in robotics teams and advanced STEM coursework.

Prerequisite: Computer Science (recommended) or instructor approval.

ESPORTS AND DIGITAL CITIZENSHIP

Grade Level(s): 9–12

Credit: 1 (Full Year)

This course blends competitive gaming with digital literacy and wellness education to help students thrive in both online and real-world environments. Students prepare for after-school participation in the PlayVS Texas League by training in popular eSports titles such as *Super Smash Bros. Ultimate* and *Splatoon 3*, while also developing communication, collaboration, and strategy skills essential to team success.

- Engages students in structured game practice, match replay analysis, and breakdowns of professional gameplay
- Encourages critical thinking and teamwork through cooperative gaming and peer feedback
- Teaches core principles of digital citizenship including media balance, online privacy, security, and respectful communication
- Discusses cyberbullying prevention, managing digital identity, and the ethical use of technology
- Covers current and emerging technology trends with weekly discussions on their implications in personal and professional contexts
- Promotes healthy gaming habits and responsible technology use through interactive media literacy lessons
- Students must pay a separate fee to participate in the PlayVS League; consoles and systems are not required for all games
- Ideal for students interested in competitive gaming, digital media, and technology careers

- This course equips students with the tools to succeed in the growing world of eSports while promoting responsible and informed digital engagement.

Prerequisite: None

DIGITAL MEDIA, MARKETING, AND BRANDING

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This dynamic course introduces students to the intersection of media arts, digital communication, and modern marketing strategies. Designed for aspiring creatives, entrepreneurs, or future media professionals, the course blends technical skill development with an understanding of branding, storytelling, and audience engagement.

- Explores the foundations of brand identity, brand voice, and visual consistency across platforms
- Teaches the use of digital tools for graphic design, video editing, content creation, and social media management
- Introduces key marketing concepts such as audience segmentation, campaign strategy, and digital advertising
- Encourages visual storytelling as a marketing tool to build emotional connections and influence perception
- Examines the role of media in shaping public opinion, driving trends, and reinforcing brand awareness
- Promotes ethical media usage, including responsible messaging and inclusive representation
- Incorporates real-world applications through project-based learning, such as designing logos, social media graphics, or video advertisements
- Guides students in developing complete branding strategies for hypothetical businesses or local community projects
- Fosters collaboration, innovation, and critical thinking in creative marketing contexts
- Students will leave the course with a portfolio of media-rich marketing materials and a deeper understanding of how design, messaging, and media combine to build impactful brands.

Prerequisite: None

ADDITIONAL HS ELECTIVES

CULINARY FARM-TO-TABLE PROGRAM

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This immersive, hands-on course bridges the gap between food cultivation and culinary creativity, empowering students to understand and appreciate the journey from seed to plate. Through gardening, harvesting, menu planning, and cooking, students explore sustainable agriculture and global culinary traditions.

- Introduces seasonal growing cycles, garden planning, and sustainable farming techniques
- Guides students in harvesting fresh ingredients and understanding soil health and environmental impact
- Teaches students to plan nutritious, balanced menus using culturally diverse recipes and whole foods
- Encourages collaborative creativity during menu development and shared meal preparation
- Emphasizes quality, sustainability, and nutrition with a focus on grass-fed meats, pasture-raised eggs, and pesticide-free produce
- Explores culinary traditions and food systems from around the world to promote global awareness
- Reinforces teamwork, culinary safety, and kitchen organization through group-based cooking labs
- Builds lifelong skills in meal planning, nutrition, and healthy living habits
- Ideal for students passionate about cooking, environmental stewardship, and wellness, this course provides a meaningful connection to food systems while fostering creativity, collaboration, and real-world culinary confidence.

Prerequisite: None

FASHION DESIGN: SEWING & NEEDLE ARTS

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This hands-on course introduces students to the foundational techniques of fashion design and sewing through practical, creative, and artistic needlework projects. Students will explore both functional and decorative applications of hand and machine sewing in the context of personal expression, craftsmanship, and design.

- Teaches fundamental hand-sewing techniques such as hemming, sewing buttons, and simple repair skills

- Introduces machine-sewing basics and proper tool handling for individual and group projects
- Explores traditional needle arts, including cross-stitch and embroidery, as creative design elements
- Provides experience with simple patterns to create projects such as pillows and wearable items
- Explains textile properties and fabric composition to guide appropriate material selection
- Encourages students to explore creativity and personal style through original design choices
- Builds problem-solving, precision, and planning skills through step-by-step project execution

By the end of the course, students will have a strong foundation in sewing, pattern reading, and fabric knowledge, along with completed projects that reflect both technical skill and personal creativity. This course is ideal for students interested in fashion, design, and practical life skills.

Prerequisite: None

ADULTING & BASIC FINANCIAL LITERACY

Grade Level(s): 11–12

Credit: 0.5 (One Semester)

This practical and empowering course equips high school students with essential life skills and foundational financial literacy to navigate adulthood with confidence and independence. Through hands-on projects and real-world applications, students will build the tools needed to manage their personal, financial, and professional lives after graduation.

- Develops financial literacy through units on **budgeting, banking, credit, debt management**, and responsible financial decision-making
- Introduces basics of **taxes, insurance, saving strategies**, and understanding major life expenses
- Teaches daily living skills such as **meal planning, nutrition, basic cooking, laundry, home and auto maintenance**
- Promotes personal wellness through **time management, self-care, personal safety, and managing medical needs**
- Strengthens interpersonal and professional skills, including **communication, relationship building, conflict resolution**, and etiquette
- Prepares students for life beyond high school with **career exploration, job readiness training, resume building, and interview prep**
- Supports college and post-secondary transition with tips on **application processes, budgeting for college, and navigating adult responsibilities**

This course encourages students to think critically about their future, make informed

decisions, and embrace the responsibilities of adulthood with self-assurance and purpose.

Prerequisite: None

INTRODUCTION TO LAW

Grade Level(s): 10–12

Credit: 1 (Full Year)

This engaging, foundational course introduces students to the American legal system and the diverse fields within the study and practice of law. Students will explore the historical development of legal systems, key legal concepts, and the real-world applications of the law through case studies, discussions, and simulations.

- Examines the U.S. Constitution and all Amendments, with emphasis on landmark Supreme Court cases, especially those involving First Amendment rights
- Analyzes key areas of law including Criminal Law, Civil Law (Torts), Contracts, Property, Business Law, Wills & Trusts, and Evidence
- Introduces students to the litigation and trial process, including courtroom procedure and professional ethics
- Features audio analysis of real U.S. Supreme Court oral arguments and peer discussions on legal reasoning and dissent
- Highlights the roles of lawyers, judges, and legal professionals, with discussions about career paths in law
- Includes mock trial activities, legal debates, and a field trip to the Travis County Courthouse to observe court proceedings
- Encourages civic literacy, critical thinking, and responsible citizenship through exploration of justice and the rule of law

This course is ideal for students with an interest in law, public policy, criminal justice, or government and serves as a strong foundation for future legal studies.

Prerequisite: None

STATISTICS

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course introduces students to foundational and applied statistical reasoning, equipping them with tools to interpret data, test hypotheses, and explore real-world applications in science, technology, and social inquiry.

- Builds a conceptual foundation through probability theory and random variables

- Covers data collection, sampling methods, and experimental design
- Teaches exploratory data analysis including distributions, graphs, and summary statistics
- Applies inferential methods such as point estimation, confidence intervals, and hypothesis testing
- Introduces linear regression and correlation analysis
- Incorporates hands-on coding and data visualization using the R programming language
- Bridges theory with practice, supporting real-world problem solving in science, business, and technology
- Develops critical thinking and data literacy skills relevant to college, careers, and research

Prerequisite: Algebra II (Pre-Calculus recommended for theoretical depth)

COMMUNITY SERVICE

Grade Level(s): 9–12

Credit: 0.5 (per Semester)

This course empowers students to grow as engaged citizens and compassionate leaders through hands-on community service and reflection. Students will participate in meaningful volunteer activities both on and off campus while learning about civic responsibility, philanthropy, and the impact of sustainable service.

- Fosters civic engagement, empathy, leadership, and social responsibility
- Encourages students to collaborate on service projects benefiting local and global communities
- Supports students in working toward the President’s Volunteer Service Award
- Offers in-class service projects such as writing letters to veterans, organizing care packages, or preparing supplies for local nonprofits
- Builds relationships through peer mentoring with younger AESA students and school-based initiatives
- Connects with local partners in Dripping Springs and Austin for real-world impact
- Guides students through planning and executing a sustainable community service project
- Encourages reflective journaling and discussion to deepen understanding of service and leadership

This course is guided by AESA’s Director of Community Service and fulfills the school’s graduation requirement of 12 service hours. Students leave this course with a stronger sense of purpose, the ability to lead community-based initiatives, and a lifelong commitment to service.

Prerequisite: None

WORLD RELIGIONS

Grade Level(s): 10–12

Credit: 0.5 (One Semester)

This course introduces students to the major world religions and spiritual traditions, fostering global awareness, cultural understanding, and respectful dialogue. Through a historical, geographic, and philosophical lens, students explore how religion shapes identity, influences society, and contributes to the human experience across time and place.

- Explores major world religions including Judaism, Christianity, Islam, Zoroastrianism, Hinduism, Buddhism, Daoism, Confucianism, Sikhism, and Shinto
- Investigates the origins, beliefs, practices, sacred texts, and historical development of each tradition
- Uses a geographic framework to study Eastern and Western religions, with Mesopotamia as a historical dividing line
- Examines the theoretical (beliefs and doctrines), practical (rituals and ethics), and sociological (community and cultural impact) dimensions of religion
- Encourages respectful engagement and dialogue across different perspectives and belief systems
- Incorporates case studies, multimedia resources, and comparative analysis to enrich understanding
- Emphasizes critical thinking, empathy, and cultural literacy in a diverse global society

The course is designed to be inclusive and non-devotional, presenting abstract and complex religious concepts in a simplified, historically contextualized format. Students gain the tools to understand how religion functions in both ancient and modern societies, while developing the sensitivity to navigate diverse beliefs with respect and thoughtfulness.

Prerequisite: None

SAT PREP

Grade Level(s): 10–12

Credit: 0 (Test Prep, Non-Credit)

This comprehensive SAT Prep course is designed to help students achieve competitive scores on both the Math and Reading/Writing sections of the SAT—and prepare for success on the ACT as well. The course blends focused practice with test-taking strategies to improve performance and build confidence for college entrance exams.

- Covers both calculator and no-calculator math sections, including algebra, data analysis, and problem solving
- Prepares students for the Reading and Writing sections through guided reading comprehension, grammar instruction, and timed practice
- Utilizes the official College Board partner, Khan Academy, for personalized, adaptive test prep aligned to student PSAT performance
- Requires students to complete a minimum of 100 minutes of independent practice weekly
- Teaches test-taking strategies, pacing techniques, and question analysis for optimal performance under pressure
- Includes vocabulary building exercises and grammar review to strengthen verbal reasoning skills
- Encourages registration with the College Board and completion of the PSAT for a customized study path
- Helps students track progress and target areas for improvement through diagnostic tools and full-length practice exams

This course is ideal for students seeking individualized SAT preparation in a structured and supportive environment.

Prerequisite: None

MEDICAL & VETERINARY MEDICINE

PROGRAM

Academic Excellence for Future Healthcare and Veterinary Professionals

The Medical & Veterinary Medicine Pathway at AESA Prep Academy offers a dynamic, experience-rich program designed for students aspiring to careers in healthcare, veterinary science, and medical research. Through a combination of rigorous academic coursework, career-specific electives, professional mentorship, and real-world internships, students graduate with a deep understanding of medical and veterinary fields and are well-prepared for college-level study and certification opportunities.

Core Science Sequence (Required Academic Courses)

All students in this pathway complete a progressive science sequence to build foundational knowledge:

- **Biology – 9th Grade**
- **Chemistry – 10th Grade**
- **Physics – 11th Grade**

Medical Pathway	Veterinarian Pathway
<p>Academic Courses: (including core science sequence)</p> <ul style="list-style-type: none"> • Anatomy and Physiology • Medical Terminology • Medical Microbiology <p>Enrichment & Experience:</p> <ul style="list-style-type: none"> • AESA Talks featuring guest speakers from the medical profession • Internships at local hospitals and medical facilities • Pre-College Certifications (earned at age 18): <ul style="list-style-type: none"> ○ Certified Nursing Assistant (CNA) ○ Emergency Medical Technician (EMT) ○ Phlebotomist 	<p>Academic Courses: (including core science sequence)</p> <ul style="list-style-type: none"> • Zoology • Texas A&M College Veterinary Science Certificate Curriculum <p>Enrichment & Experience:</p> <ul style="list-style-type: none"> • AESA Talks featuring mentors from the veterinary field • Internships at veterinary clinics and animal care facilities • Pre-College Certification: <ul style="list-style-type: none"> ○ Certified Veterinary Assistant (available at age 16)



Medical & Veterinary Medicine Pathway

Required Academic Courses:

Biology 9th grade
Chemistry 10th Grade
Physics 11th Grade

Medical Pathway

<i>AESA Talks:</i> Guest Speakers and Mentors from the Medical Profession.
Academic Courses: <ul style="list-style-type: none">• Anatomy and Physiology• Medical Terminology• Medical Microbiology
<i>Internships:</i> Internships at local Medical Facilities
<i>Pre-College Certifications:</i> CNA, EMT, Phlebotomist (all received at 18 yrs of age)

Veterinarian Pathway

<i>AESA Talks:</i> Guest Speakers and Mentors from the Veterinarian Profession.
Academic Courses: <ul style="list-style-type: none">• Zoology• Texas A&M College Veterinary Science Certificate Curriculum
<i>Internships:</i> Internships at local Medical Facilities
<i>Pre-College Certifications:</i> Certified Veterinary Assistant (can receive at 16 yrs of age)

MEDICAL PROGRAM OVERVIEW

Preparing Future Healthcare Leaders with Knowledge, Skills, and Experience

The Medical Sciences Pathway is designed for students interested in pursuing careers in medicine, healthcare, or biomedical fields.

Required Academic Courses (*Shared across Medical & Veterinary Tracks*)
See Science Core Courses for more information.

- **Biology**
- **Chemistry**
- **Physics**

Medical Pathway-Specific Academic Courses

- **Anatomy & Physiology** – In-depth study of human body systems, medical diagnostics, and disease response.
- **Medical Terminology** – Foundational vocabulary for healthcare, anatomy, pathology, and medical procedures.
- **Medical Microbiology** – Study of microorganisms and their role in human health, infection, and immunity.

Enrichment & Experience

- **Internships** – Shadowing opportunities and clinical exposure with local healthcare providers, clinics, or labs.
- **Certifications** – Students may pursue the following industry-recognized certifications:
 - **CNA** (*Certified Nursing Assistant*)
 - **EMT** (*Emergency Medical Technician*)
 - ***Phlebotomy Technician Certification**
 - **CPR / First Aid Certification**

MEDICAL TERMINOLOGY

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This course prepares students for future studies in anatomy, health science, or medical careers by building confidence in understanding and using medical vocabulary across a wide range of health disciplines.

- Teaches students how to analyze and construct medical terms using roots, prefixes,

and suffixes

- Introduces terminology related to human anatomy, physiology, diseases, diagnostic tools, and medical procedures
- Covers vocabulary used in various healthcare specialties such as cardiology, dermatology, neurology, and pediatrics
- Builds proficiency in reading, interpreting, and communicating medical information accurately and effectively
- Reinforces learning through interactive exercises, quizzes, flashcards, and real-world scenarios
- Supports interdisciplinary connections with science, biology, and health education
- Enhances college and career readiness for students interested in nursing, medicine, veterinary science, physical therapy, and other healthcare fields
- Fosters critical thinking and attention to detail in decoding complex terms and medical documentation
- By the end of the course, students will have developed a strong working knowledge of medical terminology that serves as a gateway to more advanced medical coursework and professional communication in clinical settings.

Prerequisite: None

ANATOMY AND PHYSIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

Anatomy and Physiology provides a comprehensive exploration of the human body, emphasizing both the structure and function of major organ systems and their role in maintaining health and homeostasis.

- Covers all major body systems, including the circulatory, respiratory, nervous, skeletal, muscular, digestive, endocrine, and immune systems
- Explores the interdependence of body systems and how they respond to stress, illness, injury, and environmental factors
- Engages students through hands-on labs, dissections, 3D models, and real-world case studies
- Emphasizes accurate use of medical terminology and anatomical vocabulary
- Investigates diseases, disorders, and the body's mechanisms for healing and defense
- Promotes inquiry-based learning and critical thinking through diagnostic scenarios and lab-based problem-solving
- Strengthens scientific communication through technical writing, presentations, and collaborative investigations
- Provides an essential foundation for future studies in medicine, nursing, physical therapy, sports medicine, biomedical engineering, and related fields
- Builds student confidence with scientific equipment, lab procedures, and ethical considerations in health science

Prerequisite: Biology

MEDICAL MICROBIOLOGY

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course provides an introduction to microbiology and immunology, focusing on the biology of disease-causing microorganisms and the body's immune response. Designed for students interested in health sciences, the course blends scientific theory with practical lab experience.

- Studies major classes of microbes including bacteria, viruses, fungi, and parasites
- Covers microbial structure, function, and classification
- Examines disease transmission, pathogenesis, and epidemiology
- Explores the immune system's defense mechanisms and immunological responses
- Introduces principles of disease control, prevention, and treatment
- Conducts laboratory investigations to reinforce concepts and develop research skills
- Supports career readiness in medical, pharmaceutical, nursing, and allied health fields

Prerequisite: Biology and Chemistry

VETERINARY PROGRAM OVERVIEW

The **Veterinary Science Pathway** at AESA is designed for students passionate about animal health, biology, and veterinary care. This immersive track combines rigorous science coursework with hands-on animal studies and real-world experiences. From foundational courses like Biology and Chemistry to specialized classes such as Zoology and the Texas A&M Veterinary Science Certificate Curriculum, students build the academic and practical skills needed for success in veterinary or animal science fields. With access to mentorship, internships, and pre-professional certifications, AESA students graduate with a strong foundation for future studies in veterinary medicine and related careers.

Required Academic Courses *(Shared across Medical & Veterinary Tracks)*

- **Biology**
- **Chemistry**
- **Physics**

Veterinary Pathway-Specific Academic Courses

- **Zoology** – Study of animal classification, anatomy, physiology, behavior, and ecological interactions.
- **Texas A&M Veterinary Science Certificate Curriculum** – Comprehensive coursework aligned with veterinary industry standards, preparing students for clinical and animal care responsibilities.

Enrichment & Experience

- **AESA Talks** – Monthly guest speakers and mentors from the veterinary and animal sciences community.
- **Internships** – Real-world experience through placements at veterinary clinics, animal shelters, and equine or livestock facilities.
- **Certified Veterinary Assistant (CVA)** – Available to students aged 16 and older through the Texas Veterinary Medical Association.

ZOOLOGY

Grade Level(s): 10–12

Credit: 1 (Full Year)

Zoology is an advanced life science course designed for students interested in animal biology, veterinary medicine, and related fields. Zoology offers an in-depth study of animal structure, function, classification, and behavior. Students will explore the diversity of the animal kingdom—from invertebrates to complex vertebrates—through both theoretical and hands-on learning experiences.

- Examines major animal phyla and their anatomical and physiological characteristics
- Investigates animal development, reproduction, adaptation, and behavior
- Analyzes ecological relationships, habitats, and biodiversity
- Emphasizes dissection and comparative anatomy to understand body systems
- Introduces topics in animal health, disease prevention, and the role of veterinary science
- Discusses ethical considerations in animal research, care, and conservation
- Engages students in scientific inquiry through labs, field observations, and real-world case studies
- Promotes critical thinking, research, and presentation skills through individual and collaborative projects
- Connects course content to careers in veterinary science, wildlife biology, animal husbandry, and zoological research
- Students will leave the course with a solid foundation in animal biology and a clearer understanding of animal-related career pathways. This course is ideal for students preparing for further studies in biology, animal science, veterinary technology, or related disciplines.

Prerequisite: Biology (or concurrently)

TEXAS A&M VETERINARY SCIENCE CERTIFICATE PROGRAM

Grade Level(s): 10–12

Credit: 1 (Full Year)

Prerequisites: Biology and Chemistry (concurrent or completed)

Recommended for: Students pursuing the Veterinary Science, multi-year program

AESA proudly offers students the opportunity to complete the ***Texas A&M Veterinary Science Certificate Program (VSCP)***—a rigorous, pre-professional course developed by the Texas A&M AgriLife Extension and College of Veterinary Medicine. This program is ideal for students with a strong interest in veterinary medicine, animal science, or animal care professions.

Students in this course will complete required modules in animal handling, veterinary medical terminology, clinical practices, anatomy and physiology, and animal health and safety. Instruction will blend hands-on labs, guided coursework, digital modules, and field experiences in real-world veterinary and animal care settings. The curriculum is aligned with the standards of the Texas Veterinary Medical Association and provides a comprehensive introduction to veterinary technology and care.

Upon completion of coursework, students who meet the requirements and are at least 16 years old will be eligible to test for the **Certified Veterinary Assistant (CVA) Level I credential**—a state-recognized certification that provides a competitive edge in college admissions, internships, and entry-level veterinary employment.

AESA enhances this experience through:

- **Guest speakers and mentorship** from practicing veterinarians and professionals in animal science through *AESA Talks*
- **Internship placements** at local veterinary clinics, ranches, and animal care facilities
- **Support with clinical hours documentation and certification exam preparation**

This program is a cornerstone of the **Veterinary Science Pathway** at AESA and serves as a launchpad for careers in animal health, pre-vet collegiate studies, and beyond.

Program Requirements:

- **150 hours** of veterinary science instruction
- **300 hours** of supervised clinical experience with a licensed veterinarian or certified technician
- **Completion of a verified skills checklist**
- **Passage of the CVA Level I exam** administered by the TVMA

Key Topics Covered:

- Animal handling and behavior

- Veterinary medical terminology
- Anatomy and physiology
- Safety, sanitation, and clinical procedures
- Nutrition, communication, and recordkeeping

Outcome:

Upon successful completion of the program, students will be eligible to sit for the **Certified Veterinary Assistant Level I exam**, gaining a nationally recognized credential that strengthens college applications and career readiness in veterinary and animal health fields.

PERSONAL FINANCE PROGRAM

Empowering Students with Real-World Financial Skills and Knowledge

The AESA Financial Life Skills Program is a transformative, experience-driven curriculum designed to equip students with essential financial literacy and hands-on financial experience before graduation. Unlike traditional electives, this program bridges classroom learning with real-world application—ensuring students graduate not just financially literate, but financially *ready*.

Students begin with an **introductory personal finance course** covering practical life skills such as budgeting, banking, credit, taxes, and planning for major financial milestones. They also explore core investment concepts, including compound interest, portfolio diversification, and long-term planning through real-world scenarios and simulations.

In the **Applied Personal Finance Capstone**, students take their learning further: securing part-time jobs, contributing to custodial Roth IRA accounts, responsibly building credit, and managing real income. Through structured mentorship, family engagement, and guided financial planning, students leave the program with active investment portfolios, work experience, and foundational credit histories—milestones rarely reached by peers their age.

This innovative program prepares AESA graduates for a lifetime of smart decision-making and financial independence. Through real engagement with money, markets, and meaningful planning, students move confidently into adulthood—ready to lead, save, and thrive.

Disclaimer:

The AESA Financial Life Skills Program is designed for educational purposes only. While students are introduced to financial concepts and may engage in real-world financial experiences under parental supervision, AESA Prep Academy does not provide financial, tax, or investment advice and assumes no liability for any financial decisions made by students or their families. All financial activities, including the opening of accounts, employment, or investment decisions, are the responsibility of the student and their parent or guardian. AESA strongly encourages families to consult with a qualified financial advisor or tax professional before making financial commitments or investments.

PERSONAL FINANCE

Grade Level(s): 10–12

Credit: 0.5 (One Semester)

This foundational course equips students with essential financial life skills to navigate

adulthood with confidence, discipline, and foresight. Through real-world simulations and guided instruction, students will learn how to manage income, make informed financial decisions, and build a foundation for long-term financial success.

- Introduces **budgeting fundamentals**, including how to plan, track, and adjust spending
- Covers **banking basics** such as opening and managing checking and savings accounts
- Teaches responsible use of **debit and credit cards**, interest rates, and credit scores
- Explores **real-world financial scenarios** including paying rent, purchasing a car, preparing for college tuition, and saving for a home
- Guides students through completing **tax forms**, understanding pay stubs, and evaluating common employment benefits
- Provides an introduction to **investing** with topics such as compound interest, the time value of money, ETFs, mutual funds, bonds, and diversification
- Emphasizes **financial goal-setting** and the mindset required for building wealth and financial independence

This course is ideal for students seeking to build confidence in managing their personal finances and preparing for life's major milestones. Upon completion, students are eligible to enroll in the *Applied Personal Finance Capstone*, which offers a deeper, hands-on approach to building and managing wealth.

Prerequisite: None

APPLIED PERSONAL FINANCE

Grade Level(s): 11–12

Credit: 0.5 (One Semester)(repeatable for additional credit and experience)

Prerequisite: Personal Finance; Administrative and Parental Approval/Engagement Required

This capstone course offers students a hands-on, real-world financial experience that empowers them to take control of their financial futures—before they graduate high school. Designed for upperclassmen with prior financial education and strong family support, this course builds on foundational knowledge with immersive, practical applications.

- **Earned Income & Employment:** Students secure part-time work with vetted local partners (e.g., H-E-B) to gain real-world job experience. They learn about gross vs. net income, payroll taxes, W-2 forms, and paycheck management.
- **Custodial Roth IRA Investing:** With parental guidance, students open and contribute to a Roth IRA, learning about long-term investing, compound growth, and the value of starting early.
- **Credit & Debt Management:** Students begin building credit responsibly by becoming authorized users on a parent's credit card. They explore interest rates, minimum payments, credit scores, and the risks of misusing debt.
- **Tax Filing Support:** Students review and/or file their own tax returns (with family

support), learning how to navigate W-2s, 1040 forms, and standard deductions.

- **Budgeting & Expense Planning:** Students build personal budgets using real income, track expenses, and plan for major life costs such as college tuition, rent, auto loans, and insurance.
- **Banking & Saving:** Students explore high-yield savings accounts, checking account management, and emergency fund building strategies.
- **Entrepreneurship & Side Hustles:** Students explore how to earn additional income through freelancing, reselling, or creating value through skills and services.
- **Investment & Risk Awareness:** Students continue to develop safe investing habits and evaluate risk tolerance, portfolio diversification, and financial goals.
- **Financial Independence Mindset:** Emphasis is placed on wealth-building, goal-setting, opportunity cost awareness, and delaying gratification for long-term rewards.

Fun Example: The Power of Starting Early: Roth IRA Growth Scenarios

Below are three sample scenarios showing how consistent Roth IRA contributions can grow over time, using the same annual return—but with different starting ages.

Roth IRA Growth Comparison Assumptions:

- Maximum Annual Contribution Limit: \$7,000
- Average Annual Return: 8%
- Contributions made each year through age 70 (retirement age 65)

Scenario 1: Start at Age 16

- **Total Contributions:** \$378,000
- **Ending Balance:** \$5,495,799
- Starting at 16 gives your money 54 years to grow, resulting in over \$5.4 million by age 70—even with the same \$7,000/year contributions.

Scenario 2: Start at Age 25

- **Total Contributions:** \$315,000
- **Ending Balance:** \$2,705,539
- Starting just 9 years later cuts your future wealth by more than half.
- That delay costs you approximately \$2.8 million in missed growth, even though you still invested over \$300,000.

Scenario 3: Start at Age 32

- **Total Contributions:** \$266,000
- **Ending Balance:** \$1,542,212
- Waiting until 32 means investing 30% less, but your ending balance is 70% lower than Scenario 1.
- Each year you wait significantly reduces the power of compounding.

A Note on Realism:

While it may be unrealistic for a 16-year-old to contribute \$7,000/year at this age, this scenario is intended to illustrate the power of time in the market and compound growth.

BUSINESS & ENTREPRENEURIAL PROGRAM

The **Business and Entrepreneurial Pathway** at AESA Prep Academy is designed to inspire and empower students to develop foundational and advanced knowledge in business, marketing, finance, and entrepreneurship. This pathway offers two focused tracks—**Business** and **Entrepreneurship**—each built around real-world learning experiences, skill development, mentorship from professionals in the field, and earning recognized certifications

Students in both pathways participate in a series of **required academic courses** that provide a strong foundation in business principles and communication strategies, with opportunities for specialization based on their career interests.

All students in the Business and Entrepreneurial Pathway complete:

- **Economics (12th Grade)**
- **Principles of Business, Marketing, and Finance**
- **Digital Media Arts, Marketing and Branding**

<p>Business Pathway Focus: Students who choose the Business Pathway deepen their understanding of traditional business models and professional communication.</p> <p>Key Components:</p> <ul style="list-style-type: none"> • AESA Talks: Guest speakers and mentorship from business professionals • Academic Courses: <ul style="list-style-type: none"> ○ Principles of Business, Marketing, and Finance ○ Digital Media Arts, Marketing, and Branding ○ Economics ○ Statistics ○ Business Communication ○ Capstone Practicum • Internships with local businesses • Pre-College Certifications in business-related skills 	<p>Entrepreneurial Pathway Focus: Students in the Entrepreneurial Pathway focus on innovation, start-up development, and leadership in a dynamic business landscape.</p> <p>Key Components:</p> <ul style="list-style-type: none"> • AESA Talks: Guest speakers and mentorship from entrepreneurs and founders • Academic Courses: <ul style="list-style-type: none"> ○ Principles of Business, Marketing, and Finance ○ Digital Media Arts, Marketing, and Branding ○ Economics ○ Entrepreneurship I, II, & III ○ Capstone Practicum • Internships with entrepreneurial ventures • Pre-College Certifications in entrepreneurship or innovation
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BUSINESS PROGRAM OVERVIEW

Inspiring Tomorrow's Leaders in Business, Innovation, and Strategy

The Business Focus Pathway at AESA Prep Academy equips students with the knowledge, skills, and experiences needed to thrive in the dynamic world of business. Through a blend of foundational coursework, mentorship from industry professionals, and real-world application, students gain critical insights into economics, communication, marketing, and financial literacy. This pathway empowers future business leaders with a strong academic foundation, entrepreneurial mindset, and career-ready confidence.

Shared across Business & Entrepreneurial Tracks

- **Economics (12th Grade)**
- **Principles of Business, Marketing, and Finance**
- **Digital Media Arts, Marketing, and Branding**

Business Pathway-Specific Academic Courses

- **Statistics** – Applied quantitative reasoning and data interpretation in a business context.
- **Business Communication** – Development of professional communication skills including public speaking, digital correspondence, and collaborative strategies.
- **Capstone Practicum** – A culminating, real-world project or internship showcasing applied business knowledge, strategy, and execution.

Enrichment & Experience

- **AESA Talks** – Monthly guest speakers from the business profession to inspire and mentor students.
- **Internships** – Hands-on experience with local companies and entrepreneurs.
- **Pre-College Certifications** – Opportunities to earn industry-aligned credentials before graduation (e.g., Google Business Certificates, Junior Achievement modules).

PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE

Grade Level(s): 9–10

Credit: 0.5 (One Semester)

This foundational course introduces students to the dynamic world of business, marketing, and finance. Designed to build a strong base for future entrepreneurship, finance, and marketing coursework, students will explore how businesses operate in both local and global markets while developing practical skills through hands-on activities and simulations.

- Understand how economic systems and private enterprise operate and influence the marketplace
- Explore the core principles of marketing including branding, promotion, advertising, and pricing strategies
- Analyze global business trends, ethics, and the role of entrepreneurship in driving innovation
- Learn essential financial concepts such as budgeting, money management, and the basics of investing
- Study the sales process, customer service, and factors that influence consumer behavior
- Apply knowledge to real-world business scenarios and simulations that develop problem-solving and strategic thinking
- Reinforce core academic competencies in math, communication, and analysis through a business-focused lens

This course serves as an entry point to the AESA Business & Entrepreneurship Pathway and prepares students for advanced coursework in Entrepreneurship, Business Communication, and Marketing & Branding.

Prerequisite: None

DIGITAL MEDIA ARTS, MARKETING, AND BRANDING

Grade Level(s): 9–12

Credit: 0.5 (One Semester)

This dynamic course introduces students to the intersection of media arts, digital communication, and modern marketing strategies. Designed for aspiring creatives, entrepreneurs, or future media professionals, the course blends technical skill development with an understanding of branding, storytelling, and audience engagement.

- Explores the foundations of brand identity, brand voice, and visual consistency

across platforms

- Teaches the use of digital tools for graphic design, video editing, content creation, and social media management
- Introduces key marketing concepts such as audience segmentation, campaign strategy, and digital advertising
- Encourages visual storytelling as a marketing tool to build emotional connections and influence perception
- Examines the role of media in shaping public opinion, driving trends, and reinforcing brand awareness
- Promotes ethical media usage, including responsible messaging and inclusive representation
- Incorporates real-world applications through project-based learning, such as designing logos, social media graphics, or video advertisements
- Guides students in developing complete branding strategies for hypothetical businesses or local community projects
- Fosters collaboration, innovation, and critical thinking in creative marketing contexts
- Students will leave the course with a portfolio of media-rich marketing materials and a deeper understanding of how design, messaging, and media combine to build impactful brands.

Prerequisite: None

BUSINESS COMMUNICATIONS

Grade Level(s): 9–12

Credit: .5 Credit (One Semester)

This course equips students with essential communication skills for success in academic, professional, and entrepreneurial settings. Students will build confidence and proficiency in oral, written, and digital communication while developing key workplace competencies such as professionalism, collaboration, and leadership.

- Builds written communication skills through business emails, memos, letters, résumés, and cover letters
- Develops public speaking and presentation strategies using professional tone, nonverbal language, and visual aids
- Strengthens active listening, collaboration, and problem-solving through team-based activities and meeting simulations
- Emphasizes professional etiquette, cultural awareness, and communication styles in both domestic and international business contexts
- Prepares students for the job market with mock interviews, networking techniques, and personal branding strategies
- Introduces digital communication tools and explores the role of social media, professional networking, and online presence in business
- Engages students in self-assessment and career exploration based on personal interests and industry research

- Connects classroom learning to real-world application through guest speakers, local entrepreneur panels, and workplace scenarios
 - Encourages reflection and growth by providing students with ongoing feedback on both individual and group communication performance
- This course is ideal for students interested in careers in business, marketing, entrepreneurship, law, leadership, or any field where clear and effective communication is key.

Prerequisite: None

STATISTICS

Grade Level(s): 11–12

Credit: 1 (Full Year)

This course introduces students to foundational and applied statistical reasoning, equipping them with tools to interpret data, test hypotheses, and explore real-world applications in business, science, technology, and social inquiry.

- Builds a conceptual foundation through probability theory and random variables
- Covers data collection, sampling methods, and experimental design
- Teaches exploratory data analysis including distributions, graphs, and summary statistics
- Applies inferential methods such as point estimation, confidence intervals, and hypothesis testing
- Introduces linear regression and correlation analysis
- Incorporates hands-on coding and data visualization using the R programming language
- Bridges theory with practice, supporting real-world problem solving in science, business, and technology
- Develops critical thinking and data literacy skills relevant to college, careers, and research

Prerequisite: Algebra II (Pre-Calculus recommended for theoretical depth)

ENTREPRENEURSHIP PROGRAM OVERVIEW

Grade Levels: 9–12

Credits: 1 credit per course | 4-course sequence

Empowering Tomorrow’s Visionaries, Future Founders, and Change-Makers

The AESA Entrepreneurship Program is a four-year, immersive pathway designed to empower students to think boldly, solve real-world problems, and launch ventures with purpose. With a strong emphasis on student-driven inquiry, project-based learning, and mentorship, this program gives aspiring entrepreneurs the space and support to turn their ideas into actionable solutions.

Students engage in hands-on experiences that mirror the startup lifecycle—from idea discovery and market research to brand development, financial modeling, and pitching to real investors. Along the way, students participate in the **AESA Talks** speaker series, collaborative workshops, and pitch presentations that promote leadership, communication, and adaptability.

The program integrates modern entrepreneurial tools like the Business Model Canvas, Genius Hour projects, MVP (Minimum Viable Product) development, and market validation cycles, preparing students for both postsecondary success and real-world innovation.

Shared across Business & Entrepreneurial Tracks

- **Economics (12th Grade)**
- **Principles of Business, Marketing, and Finance**
- **Digital Media Arts, Marketing, and Branding**

Entrepreneurial Pathway-Specific Academic Courses

- **Entrepreneurship I** – Foundations of entrepreneurship, idea development, business planning, and personal discovery through project-based learning.
- **Entrepreneurship II** – Branding, marketing, and validation strategies through iterative product development and storytelling.
- **Entrepreneurship III** – Business operations, finance, pitching, and launching a minimum viable product (MVP).
- **Capstone Practicum** – A culminating, real-world startup project with opportunities for presentation, mentorship, and potential launch.

Enrichment & Experience

- **AESA Talks** – Monthly guest speakers and mentors from the entrepreneurial community.
- **Internships** – Hands-on work experiences with local startups, small businesses, or

venture projects.

- **Pre-College Certifications** – Opportunities to earn certifications such as:
 - Google Entrepreneurship/Business Foundations
 - NFTE (Network for Teaching Entrepreneurship)
 - Junior Achievement Company Program

ENTREPRENEURSHIP I: DISCOVER & DESIGN

Grade Level(s): 9–11

Credit: 1 (Full Year)

Prerequisite: None

The first course in the AESA Entrepreneurship Program introduces students to entrepreneurial thinking, business fundamentals, and self-directed innovation. Students identify a problem or passion project, conduct market research, and begin designing a business concept aligned with their interests.

Through Genius Hour-inspired projects, students build confidence in communication, planning, and design thinking. Weekly progress updates, collaborative critique, and quarterly pitch presentations build skills in public speaking, creative problem-solving, and resilience.

- Entrepreneurial mindset development
- Self-directed project exploration
- Business ideation and customer discovery
- Foundational finance, marketing, and branding concepts
- Introduction to business planning and pitching

Participation in monthly *AESA Talks* and peer review

ENTREPRENEURSHIP II: BUILD & BRAND

Grade Level(s): 10–12

Credit: 1 (Full Year)

Prerequisite: Entrepreneurship I

This course focuses on turning a business idea into a viable venture. Students learn the principles of branding, storytelling, and marketing, while building a deeper understanding of business operations, customer needs, and value creation. Students further develop their projects using the Business Model Canvas to test assumptions, iterate their ideas, and begin building Minimum Viable Products (MVPs). Emphasis is placed on real-time feedback, digital tools, and refining a business's core message.

- Market research and competitive analysis
- Branding, storytelling, and identity design
- Customer validation and MVP testing
- Digital and traditional marketing strategies
- Weekly project updates and formal pitch sessions
- Guest speakers and startup simulations

ENTREPRENEURSHIP III: FINANCE & LAUNCH

Grade Level(s): 11–12

Credit: 1 (Full Year)

Prerequisite: Entrepreneurship II

In this advanced course, students focus on launching or piloting their business. They explore financial strategy, budgeting, investor relations, and legal structures. Emphasis is placed on long-term scalability, sustainability, and pitching to external audiences. Students complete an investor-ready business plan, develop financial documents, and prepare for participation in AESA’s Startup Showcase. This course fosters critical thinking, strategic planning, and persuasive communication as students work toward launching their ventures beyond the classroom.

- Advanced budgeting, pricing, and financial modeling
- Legal considerations and ethical business practices
- Pitch deck development and investor presentations
- Risk analysis and operational planning
- Professional mentorship and peer collaboration
- Final capstone pitch and portfolio submission

ENTREPRENEURSHIP IV: CAPSTONE PRACTICUM

Grade Level(s): 12

Credit: 1 (Full Year)

Prerequisite: Entrepreneurship III

This advanced course allows students to fully launch, refine, or scale a real-world business or social impact venture by applying the entrepreneurial knowledge and skills gained throughout the program.

- Leads students through the independent development of a business, product, or service
- Emphasizes real-world implementation, iterative design, and problem-solving
- Includes regular pitch practice, mentor feedback, and project reflection

- Builds advanced skills in financial modeling, marketing, customer validation, and business operations
- Offers incubator-style learning with time dedicated to product development, feedback, and iteration
- Requires attendance at entrepreneur-led workshops and networking sessions throughout the year
- Culminates in a Shark Tank-style pitch event, where students present to a panel of AESA business leaders, investors, and guests
- Encourages innovation, self-direction, and leadership in preparation for college and career

