

Science

Scientific investigation and discovery satisfies humankind's quest for knowledge and understanding in order to preserve and enhance the quality of the human experience. The National Academies of Sciences proposes that science courses support college and workforce readiness by focusing on developing skills in asking questions and defining problems, developing and using models, planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, and engaging in argument through evidence.

Courses in science will help students to achieve the following objectives:

- Develop and use an experimental design in scientific inquiry.
- Use the language of science to communicate understanding.
- Investigate phenomena using technology.
- Apply scientific concepts, skills, and processes to everyday experiences.
- Experience the richness and excitement of scientific discovery of the natural world through the collaborative quest for knowledge and understanding.
- Make informed decisions regarding contemporary issues.
- Develop scientific dispositions and habits of mind.
- Develop an understanding of the interrelationship of science with technology, engineering and mathematics.
- Explore science-related careers and interests.

High school science offerings provide students with multiple contexts in which to explore new disciplines and expand on their K-8 work through both required courses and electives. Science courses introduce complex content and support the development of critical thinking skills that are essential for student success in and beyond school as students grow as lifelong learners.

Language Arts

*Language is the essential condition of knowing,
the process by which experience becomes knowledge.
-Michael Halliday*

The study of language and literature is complex, requiring students to access multiple facets of both the written and spoken word simultaneously applying them to the experience at hand – be it reading, writing, listening, or speaking.

As language is fundamental for all other learning, English courses in Albemarle County are designed to provide students with access to a rigorous, high-quality language arts curriculum. Through standards-based, concept-centered instruction, we seek to ensure that our students engage in higher-order thinking to examine systems of language, communication, and universal themes.

To be successful, students must be able to read strategically, write analytically, and think critically and creatively. Our goal is for all students to become lifelong learners who are prepared for college and/or career paths of their choosing. Towards reaching that goal, it is our hope that students will develop the following *Language Arts Habits of Mind*:

- Understands and appreciates how literature both reflects and contributes to culture.
- Sees reading and writing as inextricably connected.
- Searches for meaning in literature that can enrich and illuminate other texts, the reader's own life, and the world in which we live.
- Reads to understand both the influences of other texts upon the text at hand and the author's perception of his/her world.
- Seeks patterns or themes in written works.
- Reads and writes with empathy, identifying alternate points of view even if s/he does not agree with them.
- Is metacognitive of his/her personal processes in reading and writing, thus able to monitor and control his/her own reading and writing processes.
- Is persistent with challenging texts and ideas, employing appropriate strategies to derive meaning.
- Uses specific tools to write more effectively.

History and Social Studies

The study of history and social science is vital in promoting a civic-minded, democratic society. The National Council for Social Studies proposes that social studies courses support college, career, and civic life readiness by focusing on planning inquiry, evaluating sources, using evidence in decision making, communicating conclusions, and taking informed actions.

Courses in History and Social Science are designed to:

- Develop the knowledge and skills of history, geography, civics, and economics that enable students to place the people, ideas, and events that have shaped our state, nation, and world in perspective;
- Support students in developing an understanding of diverse cultures, and of a shared humanity.
- Prepare students for informed, responsible, and participatory citizenship;
- Enhance students' ability to seek and recognize patterns and complex relationships such as change and continuity, conflict and cooperation, choice and consequence, and systems.
- Develop students' skills in inquiry, debate, discussion, writing, and critical reading.

Social Studies offerings in high school provide students with several means to explore new disciplines and expand on their work K-8 through both required courses and electives. Social science courses introduce complex content and support the development of critical thinking skills that are essential for student success in and beyond school as students grow as lifelong learners.

Mathematics

Students today require more rigorous mathematical knowledge and skills to pursue higher education, to compete in a technologically sophisticated connected work-force, and to be informed citizens. By taking a concept-centered approach to instruction and utilizing ACPS K-12 Essential Standards, teachers help build capacity in students to make connections across content areas. This approach will help students gain an understanding of fundamental ideas in arithmetic, measurement, geometry, probability, data analysis and statistics, and algebra and functions while developing proficiency in mathematical skills.

Students will also learn to use a variety of methods and tools to compute, including paper and pencil, mental arithmetic, estimation, and calculators. Graphing utilities, spreadsheets, calculators, computers, and other forms of electronic information technology are now standard tools for mathematical problem solving in science, engineering, business and industry, government, and practical everyday affairs. Hence, the use of technology must be an integral part of teaching, learning, and assessment.

At the heart of developing the mathematical capacity of our students, Mathematics Habits of Mind and Lifelong Learner Standards, both developed by ACPS, are embedded within mathematical process goals congruent with goals set forth by the Virginia Department of Education and the National Council of Teachers of Mathematics. Therefore, courses in mathematics are designed to build students' ability to:

- Analyze situations in mathematical terms; pose and solve problems based on observed situations.
- Select and use various types of reasoning to develop and evaluate mathematical arguments and proof.
- Organize and consolidate mathematical thinking through precise verbal, written, and graphical communication.
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.
- Use representations to model and interpret physical, social, and mathematical phenomena.
- Evaluate and use technology appropriately as a tool to support and apply the problem solving process.

Health, Physical Education & Driver's Education

Physical Education and Health play vital roles in a student's development and growth by supporting an understanding of the benefits of following a physically active lifestyle that promotes good health and wellness. Further, participation in Physical Education activities allows for the practice and demonstration of ethical behavior and respect. Some examples of the many benefits of engaging in these classes are:

- **Health and PE are linked to good health.** The value of physical fitness can never be overstated. In physical education classrooms, students learn the value of taking care of themselves through proper grooming, healthy eating, and regular exercise.
- **Good health is a preventive measure against disease.** Physical education in school is a preventive measure to teach students the value of regular exercise and healthy eating habits.
- **Health and PE are programs for muscle strength and fitness.** Physical education develops the student's motor skills and hand-eye coordination.
- **Fitness and good health promote academic learning across the curriculum.** Physical health allows students to function even better in classrooms. A good cardiovascular system developed from regular exercise promotes excellent blood and oxygen circulation. This means more nutrients circulate throughout the body, which includes the brain. This circulation produces longer attention span during classes.
- **Health and PE build self-esteem.** Students who are active in physical activities are more confident with themselves, according to research. In school, the physical education program introduces sports activities to students allowing them to make choices relative to the sports in which they may want to be involved.
- **Participation in physical education activities helps develop cooperation,** teamwork and sportsmanship skills. Most physical education programs are holistic. The program allows students to interact toward a common goal.
- **Health and PE promote a physically active lifestyle.** The purpose of physical education is to instill in students, at an early age, the value of self-preservation and choosing a lifestyle that is good for both the mind and body.

Fine Arts

"I can't imagine not having [Fine Arts classes] in my schedule. They help me keep in touch with my human side. I need one class a year where I can follow my own ideas and figure things out in my own way."

- ACPS Junior (getting permission for student name)

Visual and Performing Arts provide a natural and essential context for important Lifelong Learning habits and skills, such as creating, risk-taking, and perseverance, and also bring us joy as an expressive part of the human experience. In our Fine Arts classes we provide students the opportunity to:

- Apply musical, theatrical, and/or visual arts skills, independently and collaboratively, through performance and display opportunities, both inside and outside of the classroom.
- Communicate about the Arts by describing, analyzing, evaluating, and critiquing using Arts-specific vocabulary.
- Recognize and appreciate the aesthetic nature of the Arts, anchored in cultural and historical contexts as well as personal preferences.
- Connect with Arts opportunities and careers, both locally and globally.

The goal of Fine Arts instruction is ultimately to prepare all students for a lifetime of engagement with their creative side through art, music, theater, publishing, filmmaking and creative writing.

POS GENERAL EDITS

Page	Edited Text
14-15	Delete pages 14-15. As we no longer have the ROTC Program.
66	Replace existing introduction with the following: The Benefits of Being Multilingual Languages are at the heart of what makes us human: expressing thoughts and ideas, making new friends, and learning about the world. We've always known that learning other languages helps us to meet new people and explore new places. Science tells us that being multilingual also improves attention, creativity, problem solving, self-control, and organization. Students who are multilingual are better prepared to succeed in a global economy, connect across multiple cultures, and be the problem-solvers who will help our communities meet their greatest civic, social and economic potentials. Learning new languages opens the future to new opportunities.
69	Add the following to the side margin: "If you can speak another language, you open a window to a beautiful world. Each culture has so many precious things that you don't think about until you know that language." Xuejun Du, ACPS parent and visiting scholar from China.
67-70	Revision of course description for French I, German I, Spanish I and Japanese I: "Students in this course will learn to listen, speak, read and write in the language through a study of cultures that use the language as part of their heritage. Students will learn basic vocabulary and essential grammar so they may communicate in simple sentences and navigate real-world experiences. Students will practice basic literacy and gain insight into the way of life of other cultures associated with the language."
79	Revise language to: Grade Point Average (GPA) GPA is determined by dividing the total grade points received by the total number of credits attempted. Students ranked in the top 10% of the school's graduating class, on the basis of the un-weighted and weighted GPA, are recognized as "honor graduates." Weighted Grades: GPA will be calculated by dividing the total grade points received by the total number of credits attempted.

41	Revision of course descriptions for Drama I-V: Drama I This course explores the fundamentals of theater as an ensemble art. Students apply the creative process through in-class storytelling, playwriting, acting, and improvisation and respond to theatrical experiences using theatre arts vocabulary. This course prepares students for participation extracurricular participation in dramatic productions (although course participation is not a prerequisite for participation in extracurricular school plays and musicals). Drama II [Prerequisite: Drama I or teacher recommendation] This advanced course is designed for students who want to expand their artistic abilities and appreciation of drama. It is designed for students eager to excel in theater as an extracurricular activity beyond the classroom and/or a career. Through various modes of expression and performance, students investigate and interact with dramatic literature, theater styles, historical periods, and technical theater. Drama III [Prerequisite: Drama II or teacher recommendation] This course is similar in design and scope Drama II with an emphasis on exploration of playwriting which includes research, character development, and creation of dramatic structure, conflict, and resolution. Students study and respond to a variety of theatrical experiences that refine their collaborative, analytical, interpretive, and problem-solving skills. Performance and production outside of the classroom are encouraged. Drama IV and V [Prerequisite: Drama III or teacher recommendation] This course is for advanced students who wish to maximize creative and collaborative opportunities in the theater arts. Students refine their personal acting techniques, demonstrate a variety of performance skills, and prepare for academic and/or professional auditions. As a culmination of their coursework in drama, students have the opportunity to direct – ranging from a two-character scene to one-act play.
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