



Capital Area School for the Arts  
Charter School

# **COURSE DESCRIPTION BOOKLET 2020-2021**

[www.casa-arts.org](http://www.casa-arts.org)

717-732-8450

## A MESSAGE FROM THE CEO/PRINCIPAL...

Dear Student,

Welcome to the Capital Area School for the Arts Charter School! You are embarking on an exciting educational experience where premier arts education meets high-quality, standards-based academics.

Capital Area School for the Arts was created in 2001 through a unique partnership between Open Stage of Harrisburg and the Capital Area Intermediate Unit. In 2013, the school received charter status and is now an intensive, all-day academic and arts high school. Located in the heart of downtown Harrisburg, the school is an integral part of the economic, cultural, and artistic renaissance that has swept the city in recent years. The students enrolled in CASA have an extraordinary opportunity to participate in and contribute to that growth.

This course selection guide contains important information that will assist you in planning your next school year. We urge you and your parents to read it carefully and to direct any questions that you may have to the school counselor or principal. The administration and staff of the Capital Area School for the Arts Charter School desire to provide excellence in arts and academics, and encourage active communication with students and families.

Warm Regards,

Timothy R. Wendling  
CEO/Principal



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Harrisburg, PA 17101  
[www.casa-arts.org](http://www.casa-arts.org)

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## Counseling Services

A counselor at CASA Charter School is available to help students understand their abilities and pursue interests. The counselor can help students define goals and learn about occupational areas. Most importantly, the counselor aims to help students develop as individuals. Students are encouraged to meet with their counselor to discuss course selection. Services are provided to aid students with personal, academic, and career goals.

## Graduation Requirements

Students and their parents should keep credit and proficiency requirements in mind when selecting courses. The counselor will have a record of credits earned and needed for graduation.

To be eligible for graduation, students must earn a minimum of 25 credits. These credits must be earned in the following curricular areas:

- English – 4 credits
- Mathematics – 3 credits
- Science – 3 credits (Biology is a required class)
- Social Studies – 3 credits (U.S. Government, World History, U.S. History)
- CASA Art – 2 credits per year while enrolled at CASA
- Health – .5 credit
- Physical Education – 1 credit
- Electives – Up to 5.5 credits (.5 credit must be earned in a live art elective)

\*\*All students must carry a minimum of 6 credits per school year.

\*\*Students are not permitted to test out of a specific class or be granted credit for a class not taken.

**In accordance with state requirements, students will be required to complete a minimum of eight activities which demonstrate College & Career Readiness by the end of their junior year. CASA will host a variety of activities which will assist students in completing this requirement. Activities include field trips, master classes, college visits, job shadowing, workshops, etc. Assignments within various courses may also help fulfill this requirement.**

### **\*\*Beginning with the Class of 2022\*\***

In order to graduate, students must meet CASA's graduation requirements and must either be proficient or advanced on the Biology, Algebra I, and English Literature Keystone Exams or meet the state graduation requirements through another pathway.

1. Composite score on the Keystone Exams
  - a. A student meets or exceeds a state-defined composite score when the three Keystone Exam scores are combined, with a proficient or advanced score on at least one exam and no less than basic on the remaining two exams.
2. Local grade requirements and alternative assessments, courses and programs, acceptance to college, and or CTE evidence of readiness

- a. Students who do not meet the state graduation requirements through Keystone Exam proficiency or by meeting the Keystone Exam composite score may meet the requirements by demonstrating post-secondary readiness through evidence that illustrates college, career, and community readiness.

A detailed Class of 2022 Graduation Requirements document will be released during the Fall of 2020.

## Progress toward Graduation and Senior Status

The graduation requirements for CASA Charter School are a combination of credits and proficiencies. It is essential that students and parents assist in the monitoring and attainment of credits. Students who do not reach a certain credit level will remain with their current grade designation until their credit attainment permits movement to the next grade level designation. These designations are listed below:

- Grade 9 – Grade 10 Transition = 6 credits
- Grade 10 – Grade 11 Transition = 12 credits
- Grade 11 - Graduating Senior Status = 18 credits
- Diploma Earned = 25 credits

## Proficiency Courses / Experiences

Students who have not achieved proficiency on the Keystone Exams may be placed in a Keystone Remediation Course. These courses are designed to continue instruction in these academic areas to further develop the skills needed to attain the level of performance required by the Pennsylvania Department of Education.

## Changing Courses

Courses may be dropped in the first two-week period after the start of each new course, whether it is a full year, semester, or quarter long course, without penalty. Course change requests during the two-week drop period must be submitted in writing to Mrs. Baker using the appropriate form. Course change requests must meet one of the following criteria:

- Academic misplacement as determined by previous subject grades, related standardized test scores, teacher information, evidence of sufficient student effort, and/or principal approval
- Missing a graduation requirement
- Missing a course prerequisite
- Dropping a less difficult course for a more difficult course as approved by classroom teacher and principal

Any course dropped after this two-week period must have substantial justification, extenuating circumstances and be brought before administration for a final decision. If permission is granted, the course will reflect a WF or WP depending upon whether the student was passing or failing the course at that time. A W on a transcript will not affect a student's GPA.

It is strongly suggested that careful consideration to course selection be given. Students should choose courses and levels that are appropriate to their needs, abilities, and the competitive realities of college admissions and employment opportunities.

## Sequential Subjects and Prerequisites

It is strongly recommended that students earn a grade average of “C” or better before advancing to the next level of a subject (example – French I to French II). Students must also realize that some courses have prerequisites. Course descriptions identify these recommendations and prerequisites.

## Teacher Recommendation – All Major Subject Areas

All students must have their current teacher’s recommendation when selecting major courses for the following year. Please understand that the teacher recommendations are made in the best academic interest of the student. You are strongly encouraged to follow these recommendations. If you choose not to, however, there is no assurance that a schedule adjustment will be made at a later date. Please refer to the course change information found in the “Changing Courses” section of this booklet.

## Summer School

If a student fails a subject, they are **STRONGLY** encouraged to participate in summer school. If this is not possible, courses may be repeated the following year if available for scheduling. Students are reminded to review their graduation credits with the counselor. Students are required to pay for summer school classes. Summer school classes are offered through CAOLA, our online learning partner.

## Advanced Placement Courses

Students who plan to take any AP courses are advised to check with their potential colleges of choice regarding acceptance of AP exam scores for credit. Advanced Placement courses that are offered may vary from year to year and may be predominantly online. Students who sign up for an AP course must be prepared to complete work at the college level. Homework is extensive and students should plan accordingly.

# **COURSE DESCRIPTIONS**

CASA Charter School utilizes a blended learning environment for all academic courses. Courses may be offered in the traditional classroom setting with a “live” instructor, through the Capital Area Online Learning Association (CAOLA), or a combination of both. Please be aware that scheduling conflicts may arise which could necessitate 100% enrollment on-line.

## **Core Visual Art**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

Visual Art provides an introduction to philosophy of art; art criticism and art history, while art production classes in drawing, painting, and mixed media build knowledge and technical skill for creative artworks. Through projects such as still-life, landscape, the figure, abstraction and conceptual concerns, students will develop personal approaches that enhance their formal and individual growth as artists. Working independently and collaboratively, students are encouraged to develop personal direction, to experiment with novel approaches to art-making, and provide meaningful critiques. Supplementing the course will be pertinent art history, philosophical writings about art, video and audio clips, artist references and field trips. Students will exhibit their work and collaborate with their colleagues in other art areas. Students are expected to keep a sketchbook as part of their daily practice.

## **Core Dance**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

Creativity and individuality as well as precise technical skills are the focus of the dance curriculum at CASA. Emphasis is placed on modern dance due to its expressive nature, classical ballet for its discipline and structure, and classical jazz techniques to achieve a well-rounded experience. Cultural forms are also introduced through guest artists. Various colleges, such as Harrisburg Area Community College partner with the CASA dance program by providing master classes, workshops, and mentoring opportunities through the Performing Artists Series. The academic thrust of the program is based on the study of dance history, technique theory, and health awareness. Choreography and performance production are explored both through academic study, active participation, and collaboration with other areas of the arts in the creation of original dance compositions and formal performance. Resume, portfolio development, and audition preparation

focus on each student's future aspirations.

## **Core Film and Video**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

This course introduces the student to the creation of expressionistic and realistic video and film productions. Students are given theoretical and practical experiences in traditional and state-of-the-art video equipment. Using digital video cameras and Adobe Premiere editing software, the students create short narrative, artistic, documentary, and music style films and videos. The film and video department has an updated editing lab, which allows each student to edit independently on Adobe Premiere. Emphasis on composition, camera angles, creative content, and effective editing allow the students to create a strong body of work. They use this body of work to create a personal DVD and/or virtual demo reel that can be shown during college visits, internships, job interviews, film festivals, and to friends and family. Film and video students also collaborate with dance, music, theatre, visual art, and creative writing students to create film and video pieces for incorporation into live performances.

## **Core Music**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

Individual and collective creativity are the focus of the music program. Combining study in content-based (music theory, ear training, solfege, music analysis) and performance-based (improvisation, technique, expression) areas, vocalists and instrumentalists collaborate with each other to create original compositions and arrangements in a variety of styles. Additionally, students develop skills in reading music for his or her voice or instrument, and engage in interdisciplinary collaborations. Music students receive study and training to better prepare them for post-secondary music study and/or a career in the music industry.



## **Core Theatre**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

Theatre students study acting techniques, improvisation, voice, movement, styles of acting, musical theatre, and more. The history of theatre from the ancient Greeks to the present is also explored. Special emphasis is placed on audition preparation for college training programs and local and regional professional auditions, internship opportunities, and more. CASA Theatre students also are provided with opportunities to write original work, direct, and design and build technical elements. Special master classes taught by performing arts professionals are held throughout the year in areas such as acting, stage combat, auditioning, improvisation, theatre as a career, and more. Students also collaborate and create with their peers in multi-disciplinary projects in order to develop and broaden skills that are valued in the work place, whether arts related or not. All theatre students develop a professional portfolio annually consisting of two monologues, two songs, headshot photographs, and a performing arts resume.

## **Core Creative Writing**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: Meet audition requirements

The creative writing program emphasizes the craft of writing as a literary art, a tool of self-expression and an instrument for social change. Students experience an intensive workshop environment in which they develop poetry, prose (fiction or creative non-fiction) and various forms of professional writing including journalism and public relations. Our creative writers gain hands-on experience with publishing through *Genre*, our student-run literary magazine, and they collaborate with other artists to develop performances, choreopoems or scripts for screen or stage. Published authors and media practitioners in the community serve as mentors to our students, while the city itself becomes inspiration as they hone their craft.

# English

## **World Literature I – Honors / College Prep**

Grade 9      1.0 Credit      1 Year      Weight 1.0

Prerequisite: 90% or better in 8<sup>th</sup> grade English to qualify for Honors. Placement test may be required.

By examining great works of literature from around the world, students develop the skills to analyze and respond to various forms of literature, including epic poetry, biography, fiction, and nonfiction. The course begins by exploring some highly influential ancient pieces, and works its way forward to present-day literature. Throughout this process, students see that although language and customs change, human beings today have many of the same experiences, ideas, and feelings that they had thousands of years ago. With that knowledge, students can relate to and learn from ancient and modern authors and can then share what they learn with those around them. Students have the opportunity to practice different skills, including reading and analysis, speaking and listening, acting, grammar, writing, and vocabulary development. Students also learn how to use various tools for review and to reinforce understanding.

## **World Literature II – Honors / College Prep**

Grade 10      1.0 Credit      1 Year      Weight 1.0

Prerequisite: 90% or better in 9<sup>th</sup> grade English to qualify for Honors.

In World Literature II, students continue to expand their knowledge of great works of world literature from ancient to modern times. Students study various forms of literature including drama, fiction, nonfiction, and historical fiction. Through their study, students learn how to analyze and respond to the literature in greater depth and gain a greater understanding of how literature reflects changes in language and customs. Students also work to improve their communication skills through reading and analysis, speaking and listening, acting, and the study of grammar and vocabulary. Students learn to use various tools for review and understanding. At the end of this course, students have a knowledge of and appreciation for works of world literature. Students will take the Literature Keystone Exam at the end of this course.

## **American Literature – Honors / College Prep**

Grade 11      1.0 Credit      1 Year      Weight 1.0

Prerequisite: 90% or better in 10<sup>th</sup> grade English to qualify for Honors.

Students will read American literature texts with a focus on historical context. We will begin with Puritanism, and work our way through American history as the school year progresses. This can include, but is not limited to The Age of Reason, Romanticism, Transcendentalism, Realism/Naturalism, The Harlem Renaissance/African American literature, and Modern literature. Students will be exposed to multiple genres of literature and be challenged to interpret each piece

of literature soundly and handle literary techniques skillfully. Students will also work to improve their communication skills through reading and in-depth analysis, speaking, and writing skills.

### **British Literature – Honors / College Prep**

Grade 12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: 90% or better in 11<sup>th</sup> grade English to qualify for Honors.

Students will read British literature texts with a focus on historical context. We will begin with Anglo-Saxon literature, and work our way through British history as the school year progresses. This can include, but is not limited to medieval literature, the Renaissance, the Restoration, Romanticism, Realism/Naturalism, and Modern/Post-Modern literature. Students will be exposed to multiple genres of literature and be challenged to interpret each piece of literature soundly and handle literary techniques skillfully. Students will also work to improve their communication skills through reading and in-depth analysis, speaking, and writing skills.

### **AP\* English Language and Composition (2020-2021 Live Taught)**

Grade 11,12    1.0 Credit    1 Year    Weight 1.05

Prerequisite: 93% or higher in previous English course and teacher recommendation. Summer work is required.

In AP English Language and Composition, students investigate rhetoric and its impact on culture through analysis of notable fiction and nonfiction texts, from pamphlets to speeches to personal essays. The equivalent of an introductory college-level survey class, this course prepares students for the AP exam and for further study in communications, creative writing, journalism, literature, and composition. Students explore a variety of textual forms, styles, and genres. By examining all texts through a rhetorical lens, students become skilled readers and analytical thinkers. Focusing specifically on language, purpose, and audience gives them a broad view of the effect of text and its cultural role. Students write expository and narrative texts to hone the effectiveness of their own use of language, and they develop varied, informed arguments through research. Throughout the course, students are evaluated with assessments specifically designed to prepare them for the content, form, and depth of the AP Exam. AP English Language and Composition is recommended for 11th and 12th grade students. This course fulfills 11th grade requirements. Consequently, we recommend that students take only one of the following courses: English 11, Texas English III, and AP English Language and Composition. This course has been authorized by the College Board to use the AP designation. \*AP is a registered trademark of the College Board.

## **AP\* English Literature and Composition (CAOLA)**

Grade 11,12   1.0 Credit   1 Year   Weight 1.05

Prerequisite: 93% or higher in previous English course and teacher recommendation / Completion of summer work required

This course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. This course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in this course will deepen and expand their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations. Annotation of text will be a major aspect of this course and as such, students taking this course will be required to provide their own hardcopy text of any materials read in class.

Both of the above listed AP courses are organized according to the requirements and guidelines of the current *AP English Course Description* and therefore students will be expected to:

- Analyze and interpret samples of purposeful writing, identifying and explaining an author's use of rhetorical strategies.
- Analyze images and other multimodal texts for rhetorical features.
- Use effective rhetorical strategies and techniques when composing.
- Write for a variety of purposes.
- Respond to different writing tasks according to their unique rhetorical and composition demands, and translate that rhetorical assessment into a plan for writing.
- Create and sustain original arguments based on information synthesized from readings, research, and/or personal observation and experience.
- Evaluate and incorporate sources into researched arguments.
- Demonstrate understanding of the conventions of citing primary and secondary sources.
- Gain control over various reading and writing processes, with careful attention to inquiry (research), rhetorical analysis and synthesis of sources, drafting, revising/rereading, editing, and review.
- Converse and write reflectively about personal processes of composition.
- Demonstrate understanding and control of Standard Written English as well as stylistic maturity in their own writing.
- Revise a work to make it suitable for a different audience.

The equivalent of an introductory college-level survey class, these courses prepare students for the AP exam which they are expected to take. *\*AP English Language & Composition and AP English Literature & Composition will be offered on an every-other year rotating schedule. For example, if AP English Language & Composition is offered in the current school year, AP English Literature and Composition will be offered the next school year.*

**SAT® Critical Reading and Writing (CAOLA)**

Grade 10,11 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

This course is designed to help students prepare for the critical reading and writing portions of the SAT. In addition to test-taking strategies, students learn reading comprehension strategies, including inferring ideas, understanding tone and intention, and identifying the meaning and crucial elements in a piece of writing. Students also learn about comma usage, case, identifying and creating complete sentences, and writing concise sentences with subject-verb agreement. Finally, students learn how to apply correct grammatical structure to sentences, recognize and understand modifiers and idioms, and develop a piece of writing in response to an essay question.

# Mathematics

## **General Mathematics (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: N/A

The goal of this course is to motivate students while helping them establish a strong foundation for success in developmental and consumer mathematics. The course leads students through basic mathematics and its applications, focusing on whole numbers, integers, decimals, and percentages. Students make sense of the mathematics they encounter each day, including wages, banking, interest, credit, and consumer costs. At the end of this course, students have a knowledge and appreciation for mathematics and problem-solving that prepares them for the future.

Prerequisite: None

Length: Four Parts

Recommended Materials: Graphing Calculator

## **Pre-Algebra (CAOLA)**

Grade 9   1.0 Credit   1 Year   Weight 1.0

Prerequisite: N/A

Pre-Algebra helps students make a successful transition from arithmetic to algebra by focusing on basic concepts of arithmetic and the applications of mathematics. Students learn about integers, fractions, decimals, expressions, equations, ratios, proportions and percentages, inequalities, graphing, probability and statistics, and geometry. The course highlights the math skills needed to be successful in everyday life and prepares students for future mathematics courses.

## **Algebra I with ALEKS**

Grade 9-12   2.0 Credits   1 Year   Weight 1.0

Prerequisite: N/A

This course takes students on a journey through algebraic concepts and applications. The course focuses on linear equations, inequalities, functions, graphing, systems of equations, polynomials, factoring, quadratic equations, probability, statistics, rational expressions, roots, and radicals. Students build critical thinking skills and problem-solving techniques required to grasp algebraic fundamentals. At the end of the course students have a knowledge of and appreciation for algebra and are prepared for future mathematics courses. Students will take the Algebra 1 Keystone Exam at the end of this course. This course is worth 2.0 credits when combined with ALEKS. Placement testing may be required for mathematics for incoming freshmen.

### **Geometry – Honors / College Prep**

Grade 9-10   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Algebra I; 85% or higher and/or teacher recommendation for Honors.

Through real-world examples and problems, this course encourages students to see how geometry is useful in everyday life. The course focuses on parallel lines, perpendicular lines, triangles, circles, polygons, area, volume, similarity, trigonometry, geometric reasoning, and proofs. This course also highlights building critical thinking skills and problem-solving techniques required to help students grasp geometric concepts. By the end of this course students have knowledge of and appreciation for geometry and problem-solving that prepares them for future mathematics courses.

### **Geometry – College Prep / Foundations (CAOLA)**

Grade 11-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Algebra I

Through real-world examples and problems, this course encourages students to see how geometry is useful in everyday life. The course focuses on parallel lines, perpendicular lines, triangles, circles, polygons, area, volume, similarity, trigonometry, geometric reasoning, and proofs. This course also highlights building critical thinking skills and problem-solving techniques required to help students grasp geometric concepts. By the end of this course students have knowledge of and appreciation for geometry and problem-solving that prepares them for future mathematics courses.

### **Algebra II – Honors / College Prep**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Algebra I and Geometry; 85% or higher and/or teacher recommendation for Honors.

In this course, students learn algebraic concepts such as linear functions, linear systems, matrices, quadratic functions, polynomial functions, polynomials, exponential functions, logarithmic functions, rational functions, radical functions, conic sections, probability, statistics, sequence, series, and trigonometric functions. Throughout the course, students develop critical thinking skills and problem-solving techniques. By the end of this course, students gain knowledge of and appreciation for algebra and problem solving that prepares them for future mathematics courses.

## **Algebra II – College Prep/Foundations (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Algebra I and Geometry

In this course, students learn algebraic concepts such as linear functions, linear systems, matrices, quadratic functions, polynomial functions, polynomials, exponential functions, logarithmic functions, rational functions, radical functions, conic sections, probability, statistics, sequence, series, and trigonometric functions. Throughout the course, students develop critical thinking skills and problem-solving techniques. By the end of this course, students gain knowledge of and appreciation for algebra and problem solving that prepares them for future mathematics courses

## **Precalculus**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Algebra II and Geometry; teacher recommendation

Precalculus helps students gain the knowledge they need for success in calculus and college math courses. The course focuses on rational, polynomial, exponential, and logarithmic functions; trigonometry; probability and statistics; vectors; and analytical geometry. Throughout the course, students work to improve their critical-thinking skills and problem-solving techniques. By the end of this course, students gain knowledge of and appreciation for calculus and its applications.

## **Calculus**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Precalculus; teacher recommendation

A study of functions with applications, and an introduction to differential calculus. Topics include a review of algebra and functions, mathematical modeling with elementary functions, rates of change, inverse functions, logarithms and exponential functions, the derivative, differential equations, and Euler's method. Precalculus topics are reviewed when they are needed in the development of calculus. Topics include graphical interpretations of the derivative, zeroes of functions, optimization, related rates, anti-differentiation, initial value problems, review of trigonometry, modeling with trigonometric functions, geometric sums and series, and the Fundamental Theorem of Calculus. Upon completion of this course a student will have studied much of the material on the Fundamental Theorem of Calculus.



### **AP Calculus (CAOLA)**

Grade 11,12 1.0 Credit 1 Year Weight 1.05

Prerequisite: Precalculus; 85% or higher and/or teacher recommendation.

In AP\* Calculus AB, students learn to understand change geometrically and visually (by studying graphs of curves), analytically (by studying and working with mathematical formulas), numerically (by seeing patterns in sets of numbers), and verbally. Instead of simply getting the right answer, students learn to evaluate the soundness of proposed solutions and to apply mathematical reasoning to real-world models. Calculus helps scientists, engineers, and financial analysts understand the complex relationships behind real-world phenomena. The equivalent of an introductory college-level calculus course, AP Calculus AB prepares students for the AP exam and further studies in science, engineering, and mathematics.

Required Materials TI-84 Plus, TI-83, or TI-83 Plus Calculator \*\*Purchased by the student\*\*

### **Consumer Math**

Grade 11,12 1.0 Credit 1 Year Weight 1.0

Prerequisite: Teacher Recommendation

The goal of this course is to motivate students while helping them establish a strong foundation for success in developmental and consumer mathematics. The course leads students through basic mathematics and its applications, focusing on whole numbers, integers, decimals, and percentages. Students make sense of the mathematics they encounter each day, including wages, banking, interest, credit, and consumer costs. At the end of this course, students have a knowledge and appreciation for mathematics and problem solving that prepares them for the future.

### **Probability (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: Teacher recommendation or completion of Algebra II.

In this course, students take a comprehensive and engaging look at the field of probability. They begin by learning the basic terms, types, theories and rules of probability. Next, the course covers random outcomes and normal distributions, as well as binomial probabilities. Finally, students learn about geometric probability, sampling distribution, how to understand populations, and the central limit theorem. By the end of this course, students gain a knowledge of and appreciation for the field of probability and how it is used in everyday life.

### **Statistics (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: Teacher recommendation or completion of Algebra II.

This course opens students' eyes to the many uses of statistics in the real world—from sports and

the weather to health and politics. Students learn basic concepts, how to use graphs to represent data, and ways to analyze data. They explore statistical relationships, including the use of correlations, residuals and residual plots, and scatter plots. Finally, students learn how to model nonlinear relationships using exponential and logarithmic functions and how to design a sample to produce the correct type of data (observational vs. experimental). By the end of this course, students gain a knowledge of and appreciation for the field of statistics and its application in the real world.

### **Trigonometry (CAOLA)**

Grade 11,12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Algebra II

This course explores trigonometric functions and practical applications of trigonometry, such as solving real-life problems through engineering, physics, construction, and design. Students investigate graphs, linear functions, quadratic functions, trigonometric functions, analytical trigonometry, analytical geometry, vectors, and advanced functions. Students develop critical-thinking skills and problem-solving techniques to help them succeed in understanding and applying trigonometric principals. By the end of this course, students gain knowledge of and appreciation for trigonometry and problem solving that will prepare them for future mathematics courses.

### **SAT® Mathematics (CAOLA)**

Grade 10,11 .25 Credit 1 Quarter Weight 1.0

Prerequisite: Teacher recommendation

This course helps students prepare for the mathematics portion of the SAT® by equipping them with the knowledge and strategies needed to succeed. Students learn about basic mathematical theories and operations, including rational numbers, integers, methods to solve counting problems, and the characteristics of sequences and series of numbers. Students then learn how to use algebra for solving problems, including polynomial functions, linear equations and inequalities, and variation. The final unit covers geometric shapes and how to calculate the area and perimeter of polygons and the circumference of circles. Students also learn how to solve for missing angles and sides of triangles, and understand lines, similar figures, and ratios.

# Science

## **Biology**

Grade 9-11    1.0 Credit    1 Year    Weight 1.0

Prerequisite: N/A

The science of biology is large, complex, and constantly changing. This course provides students with a broad and interactive experience covering the main topics of biological science. Topics range from cell reproduction to the diversity of life. Students also learn about the chemical components of life, the process of energy conversion, and life's functions. The course explores genetics and evolution, incorporating the latest scientific research. Finally, the course covers ecology to raise students' awareness of the many challenges and opportunities in the modern biological world. Throughout the course, students complete virtual lab activities that reinforce the material and provide an opportunity to apply their knowledge through interactive experiments and activities. Students will take the Biology Keystone Exam at the end of this course.

## **Chemistry – Honors / College Prep / Foundations (CAOLA)**

Grade 10-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: Algebra I; 85% or higher in Biology and/or teacher recommendation for Honors.

Chemistry is an important science that challenges students to apply their studies in previous sciences to new theories, models, and problems. The course begins with a discussion of the history and importance of chemical principles; moves through the various models of the atom and chemical reactions; explores relationships among liquids, gases, and solids; and investigates the role of energy in these relationships. The course ends with a unit on organic chemistry, a branch of the science that focuses on the molecules that are important to living things. Lab activities throughout the course reinforce the material and provide an opportunity for students to apply their knowledge through hands-on experiments and activities.

## **Physics (CAOLA)**

Grade 11,12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: Algebra II; Chemistry; teacher recommendation.

This course is designed to provide students with an overview of traditional physics and the latest, most modern research in the field today. Beginning with Newtonian mechanics, students learn that every object is acted upon by multiple and predictable forces. The course moves on to investigate the laws of thermodynamics, covering fluid mechanics and the relationships between matter and energy. The course also explores the various models used to explain and apply the universal forces of electricity and magnetism. Students learn the characteristics of waves and the basics of optics before the final set of lessons on atomic physics. Here, students review the characteristics of the atom and its elemental particles, and apply their knowledge to modern physics.

## **Earth Science**

Grade 10-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: Teacher recommendation

Earth Science is the combined study of how geology, physics, astronomy, chemistry, and biology impact Earth and its place in the universe. This engaging course will investigate Earth and its part of a larger system which includes formation of the universe, Earth-Moon-Sun system, reasons for the seasons, and star composition. Next, the course will cover how rocks and fossils contain clues to Earth's past and how this information is used to understand Earth's processes, how life evolves, and how it determines the age of the Earth. Earth's internal processes, plate tectonics, and physical processes that shape the physical world are explored as students learn about the modern science behind topics such as continental drift, sea-floor spreading, structure of the Earth, and natural disasters. Lastly, students will study how humans impact the Earth through the study of ocean ecosystems and alternative energy sources.

## **Environmental Science**

Grade 10-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: Biology

Environmental Science, sometimes referred to as Ecology, is the study of the relationships and interdependence of organisms and their connection to the nonliving, or abiotic factors in the natural world. This course provides students with an advanced profile of the living relationships, abiotic factors, human influences, and current state of Earth's ecosystems. First, population ecology, evolution and community ecology, and biomes are studied in order to investigate how life on Earth depends on interactions among organisms and their environments. Next, the course will cover the cycle of matter throughout the ecosystems to provide the basic materials to support life, as well as how humans impact these cycles through energy extraction, production, and use. Lastly, we will focus on environmental health and how we can use science to understand the complex interactions between humans and their environment which will include Earth's limited resources, environmental sustainability, economics, and environmental policy.

## **Physical Science (CAOLA)**

Grade 10-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: Teacher recommendation

Physical Science is an interactive and engaging course that covers the sciences of chemistry and physics. The course begins with a unit on the nature of science and a review of measurement and its importance. The course proceeds with the study of chemical principles, exposing students to topics such as the properties of matter, the structure of the atom, the formation of bonds, and the properties of solutions. The course then moves to the science of physics, describing the topics of motion, force, work, and energy. Students apply their knowledge of these topics through problems, explanations, graphs and virtual lab activities.

## **Anatomy and Physiology (CAOLA)**

Grade 10-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Biology

Why is the human body so complex? How do all of the different structures of the body work together? In Anatomy and Physiology, students survey the different systems of the human body, with an emphasis on the relationship between structure and function. The course begins by teaching the language of anatomy and familiarizing students with the building blocks of the human body: cells and tissues that combine to create the complex organs and support structures of the body. Students get to know their bodies inside and out, from the skin that covers and protects the entire body to the skeleton and the attached muscles that provide support and create movement. Moving deeper inside, students explore the cardiovascular, respiratory, urinary, and digestive systems, which work together to supply the body with nutrients and rid it of wastes. Students also learn how the nervous and endocrine systems respond to the environment and maintain a state of balance. Students study the reproductive system as they follow the development of a human from a single-celled zygote to a mature adult. Interwoven throughout many lessons is information about genetic diseases, dysfunctions, and ailments such as diabetes, HIV, and arthritis. By the end of this course, students will feel as if they have read the owner's manual for their bodies.

## **Keystone Biology Remediation**

Grade 10,11   .5 Credit   1 Semester   Weight 1.0

Prerequisite: Remediation course mandatory for all students who did not demonstrate proficiency on Biology Keystone Exam.

This course helps students prepare for the state of Pennsylvania's Keystone Exam in Biology. The content of this course is focused on the assessment anchors for the Biology exam as outlined by the Keystone Exam Program and focuses on four key Biology topics: cells, cell processes, continuity, and unity of life. The course integrates assignments and problem solving exercises throughout the lessons that reinforce the key concepts and help the student prepare for the end of course exam.

The Keystone assessment anchors that are covered in this course include:

- Basic Biological Principles
- The Chemical Basis for Life
- Bioenergetics
- Homeostasis and Transport
- Cell Growth and Reproduction
- Genetics
- Theory of Evolution
- Ecology

**Life Science (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Teacher recommendation

This survey of the biological sciences introduces students to the structure and function of living things and the natural relationships that exist on Earth. The course begins with the definition of life and a discussion of how living things are classified and organized by scientists. Students then work through material that presents the molecular building blocks of organisms, both microscopic and macroscopic views of life, the diversity and universality of species, and the characteristics of various groups of life. The course culminates with a unit on evolution, asking students to apply what they learned about the natural world to the complex relationships and environmental factors that have shaped the ever-changing species sharing the world today.

**Astronomy (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

In this course, students take a fascinating journey through the cosmos and learn basic concepts in the study of astronomy. The course begins with the celestial objects closest to home, scanning the solar system to provide students with an overview of the planets, moons, asteroids, and comets that revolve around the sun. The course then moves beyond the solar system to cover the characteristics of our galaxy – the Milky Way. Students are amazed to learn the sheer size of this system and of other galaxies nearby, and about the formation and death of stars, supernovas, black holes, and even theoretical wormholes. Finally, the course reaches to the edges of time and space to investigate the properties of the universe as a whole, when students learn about theories explaining the very beginnings of existence and the expansion of the universe. Students also learn about Einstein's theory of relativity, time travel and the search for extra-solar planets.

**Biotechnology (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

This course provides students with a comprehensive and engaging look at the field of biotechnology. Students explore the history of biotechnology and advances in the field, as well as basic information about biotechnology laboratories and careers. Students learn about chemistry and the units of measurement used in biotechnology, and the basic biology of the cell, DNA, RNA, and proteins. The course concludes with a survey of the applications of biotechnology in the research lab and in industry, including enzymes, techniques, and plasmids.

**Epidemiology (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Epidemiologists investigate the causes of disease and other public health problems in an effort to prevent them from spreading. This course introduces students to the field of epidemiology, including the basic concepts related to infectious disease, specializations in epidemiology, and study design. Students learn about the specific parts of an epidemiology study and why they are important, including types of sampling, selection bias, standardization, confidence intervals, and evidence-based research.

**Forensics (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

This engaging course introduces students to the field of forensics through a comprehensive look at related careers, laboratories, crime scene processing, evidence, and the impact of media on criminal investigations and trials. Students learn about specific techniques used in crime scene investigations, including autopsy, fingerprint analysis, DNA fingerprinting, and other types of evidence and analysis important to solving crimes. At the end of the course, students are introduced to a variety of specialized forensic sciences, analyze specific case studies, and learn about the Innocence Project and Freedom Project.

**Genetics (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Through this introduction to the field of genetics, students learn about the theories of Darwin and Wallace; the concepts of adaptation, genotype and phenotype; and basic concepts related to cells, DNA, and RNA. Students study Gregor Mendel's pioneering work in genetic variation, and the basic concepts that have been developed since. Finally, students explore applications of genetics, including metagenomics, genetically modified organisms, DNA technologies, genetic testing, and other clinical and nonclinical applications of genetics.

### **Introduction to Technological Sciences (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

In this course, students learn about three main fields of technological science: engineering, biotechnology, and information technology. The first unit of the course surveys 15 distinct sub-fields of engineering, exploring the science background, real-world applications, and career opportunities in fields including aerospace, nuclear, and software engineering. In the second unit, students study cutting-edge biotechnology topics such as gene therapy, bioengineering crops, and biodegradation. The final unit focuses on the study of informational technology, covering computer networking, data storage, and data encryption for secure communications.

### **Natural Disasters (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Around the globe, natural disasters are a seemingly daily occurrence. This course provides an overview of the different types of catastrophic forces of nature and their impact on the populations that they strike. The course gives students a greater understanding of the causes and effects of natural disasters; students also investigate what can be done to prevent such disasters. The first unit covers land-based events, detailing how scientists predict and react to avalanches, earthquakes, volcanic eruptions, mudslides, and fires. The second unit focuses on catastrophic events that begin in the ocean and atmosphere, describing the impact of flooding, hurricanes, blizzards, and droughts. In the third unit, students learn how disease spreads and how quickly it can impact the world's population. The final unit looks skyward for potential catastrophic impacts from comets and asteroids.

### **Science of Computing (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

This course is a survey of the past, present, and future of computer technology. Students explore fascinating and enlightening topics, such as how Stonehenge may actually have been used as a type of computer, and how inventions such as the abacus and the microprocessor have made today's technology possible. Students also learn about the science behind the hardware and software used today. Topics like algorithms, operating systems, and networks are described in detail and placed into context as tools for human innovation. Finally, the course looks to the future, introducing students to foreseeable improvements to current technology and visionary breakthroughs like artificial intelligence, quantum security, and biological processors.



**Sports Medicine (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

In this course, students explore how to keep “the human machine” in optimal condition. They learn about various aspects of sports medicine, including careers, basic concepts, and techniques. Students also learn about sports injuries and how they are treated so athletes can continue to compete. At the end of this course, students have a knowledge of and appreciation for the field of sports medicine and its applications.

**Sports Science (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Modern day sports and the world-class athletes who excel at them take center stage in this journey through sports science. This course provides students with a survey of the impact of physics, biomechanics, and physiology on 14 modern sports. The first unit describes the role physics plays in a variety of sports, from the aerodynamics involved in auto racing to the force behind a boxer’s right hook. The next unit investigates the biomechanics of these sports, discussing concepts like the contortion of a gymnast’s body and the cause of tennis elbow. The last unit focuses on the limits of the human body, describing the energy used by cyclists during a mountain climb through the Alps and the reaction time required to hit a 90 miles per hour fastball. Overall, the course presents engaging information that will forever change the way students look at world-class athletes and competition.

**Stem Cells (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

In this course, the diverse and rapidly changing field of stem cell research comes alive for students. Students learn about the different types of stem cells, how stem cells were discovered, their importance to research, and the goals, challenges, and controversies in the field. Students explore human and mouse embryonic stem cells and a variety of stem cells found in different parts of the body, as well as the potential clinical applications of these cells to human medicine. Finally, students study stem cell research models.

## **Superstars of Science (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Superstars of Science helps students appreciate the accomplishments and impact of the most influential scientists upon today's society, from scientists who lived in ancient Greece to those who are still alive and working today. The timeline structure allows students to see how science is cumulative in nature and how the discoveries and inventions of every scientist are influenced by past breakthroughs. It is commonly said that every great scientist stands on the shoulders of those in the past; this course explores that concept. The biography of each scientist, one per lesson, includes not only their contributions to their field, but the context of their work at the time and the world's reaction to their groundbreaking ideas.

# **Social Studies**

## **U.S. Government**

Grade 9      1.0 Credit      1 Year      Weight 1.0

Prerequisite: N/A

This stimulating course offers students a comprehensive examination of the US government. Students explore the evolution of American democracy, from its birth in the 18th century to the expansive role of federal, state, and local governments today. The course covers topics such as changes to the Constitution, the function of the Supreme Court, the structure of Congress, and the importance of the media in providing a basis for the functions of government. The course explores the relationship between the political parties and lobbyists, and the process of monitoring and funding federal elections. Students understand the roles of state and local governments and their impact on our daily lives. At the end of this course, students have a knowledge of and appreciation for the workings and history of the US government and its impact on American society.

## **World History**

Grade 10      1.0 Credit      1 Year      Weight 1.0

Prerequisite: N/A

World History takes students on a journey through the events that have shaped the modern world, and the leaders who changed the course of history. The material is organized sequentially, exploring history from 1400 CE to the present day. Topics covered include the Renaissance, the French Revolution, the Industrial Revolution, and the World Wars. At the end of this course, students have an appreciation for the relationship between past events and the characteristics of the present day.

## **American History**

Grade 11,12      1.0 Credit      1 Year      Weight 1.0

Prerequisite: N/A

The focus of the American History course is the study of American ideas and institutions from the Age of Exploration to the present. Fundamental concepts in civics, economics, and global interactions will also be reinforced. Students will obtain a basic knowledge of American culture through a survey of major issues, movements, people, and events in United States history. Students will also be exposed to historical thinking skills such as continuity and change over time, contextualization, comparison, and analysis.

### **World Geography (CAOLA)**

Grade 11,12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: N/A

This course explores the world's geographical divisions, and the differences between Earth and the other planets in our solar system. In addition to Earth's geographical divide, the course explores how the cultural divide between countries impacts international relations. Through the study of geography, students analyze energy usage and explore ways to make the most of our planet without abusing its resources. The study of world geography through historical, cultural, physical, and economic lenses offers students a different perspective and understanding of our world.

### **Macroeconomics (CAOLA)**

Grade 11,12   .5 Credit   1 Semester   Weight 1.0

Prerequisite: N/A

In this course students study macroeconomics, which deals with the economies of nations and regions. Students will learn how these economies function and measure up against one another by exploring concepts including Gross Domestic Product (GDP), unemployment rates, and price indices. At the end of this course, students will be able to understand the world economy and recognize the events and people who have contributed to our understanding of macroeconomics.

### **Microeconomics (CAOLA)**

Grade 11,12   .5 Credit   1 Semester   Weight 1.0

In Microeconomics, students learn about the basic structure of economics and how it affects world events and people's everyday lives. Upon completing this course, students have a better understanding of personal finance, the role and process of taxation, and the risks and rewards of investment. The course discusses the need for economic systems, examines the concepts of supply and demand and consumer theory, and evaluates past and present occupation trends. Students compare the mixed economies of various nations; learn about traditional, command, and market economies; and examine the role of government in regulating the economy.

### **Early American History (CAOLA)**

Grade 11,12   .25 Credit   1 Quarter   Weight 1.0

Prerequisite: N/A

This course provides students with a comprehensive and engaging look at early American history from the impact of the early Spanish explorers through the Civil War. Students learn about key events of European exploration and colonization of the Americas. Students learn about the establishment of the United States as an independent country, the importance of the US Constitution, and the impact

of the Constitution on the continued development of the country. At the completion of this course, students have both a knowledge of and appreciation for the early history of the United States.

### **Early World History (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Starting at the dawn of civilization and arriving at the doorstep of the Renaissance, Early World History introduces students to the major events that laid the foundations of the modern world. This course exposes students to the development of the world's early civilizations and the cultures that created them. Students experience the rituals of the Aztecs, the might of the Roman Legions, and the building of the Great Wall of China. From these ancient beginnings, students trace the development of empires, the emergence of the world's major religions, and the mechanisms of trade and conflict that brought cultures together. Thematically, the course focuses on how empires have interacted to spread goods, ideas, and technological innovations such as silk and gunpowder. The course traces major events from ancient Mesopotamia through the Black Death of the fourteenth century, preparing students to explore more recent world history in the future.

### **AP US History (2020-2021 CAOLA)**

Grade 11,12 1.0 Credit 1 Year Weight 1.05

Prerequisite: 93% or higher in previous Social Studies course and teacher recommendation

In AP U.S. History, students investigate the development of American economics, politics, and culture through historical analysis grounded in primary sources, research, and writing. The equivalent of an introductory college-level course, AP U.S. History prepares students for the AP exam and for further study in history, political science, economics, sociology, and law. Through the examination of historical themes and the application of historical thinking skills, students learn to connect specific people, places, events, and ideas to the larger trends of U.S. history. Critical-reading activities, feedback-rich instruction, and application-oriented assignments hone students' ability to reason chronologically, to interpret historical sources, and to construct well-supported historical arguments. Students write throughout the course, responding to primary and secondary sources through journal entries, essays, and visual presentations of historical content. In discussion activities, students respond to the positions of others while staking and defending claims of their own. Robust scaffolding, rigorous instruction, relevant material, and regular opportunities for active learning ensure that students can achieve mastery of the skills necessary to excel on the AP exam.

### **AP US Government (CAOLA)**

Grade 11,12 1.0 Credit 1 Semester Weight 1.05

Prerequisite: 90% or higher in previous Social Studies course and teacher recommendation

AP\* U.S. Government and Politics studies the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political data, hypotheses, concepts, opinions, and processes. Along the way, they'll learn how to gather data about political behavior and develop their own theoretical analysis of American politics. They'll also build the skills they need to examine general propositions about government and politics, and to analyze the specific relationships between political, social, and economic institutions. The equivalent of an introductory college-level course, AP U.S. Government and Politics prepares students for the AP exam and for further study in political science, law, education, business, and history.

### **AP Psychology (CAOLA)**

Grade 11,12 .5 Credit 1 Semester Weight 1.05

Prerequisite: 90% or higher in previous Social Studies course and teacher recommendation

AP\* Psychology provides an overview of current psychological research methods and theories. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They'll study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. The equivalent of a 100-level college survey course, AP Psychology prepares students for the AP exam and for further studies in psychology and life sciences.

### **AP Macroeconomics (CAOLA)**

Grade 11,12 .5 Credit 1 Semester Weight 1.05

Prerequisite: Algebra II

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They'll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone's life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP exam and for further study in business, political science and history.

## **AP Microeconomics (CAOLA)**

Grade 11,12   .5 Credit   1 Semester   Weight 1.05

Prerequisite: Algebra I

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They'll also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP exam and for further study in business, history, and political science.

## World Language

\*Please note that taking a world language on-line can be quite difficult. Students have the opportunity to slow down the pacing of their language courses by stretching out one year of a foreign language over a period of two years; i.e. Spanish 1A and 1B, in which .5 credit will be awarded for each course.

### **French I**

Grade 9-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: N/A

French I is a comprehensive and engaging introduction to French language and culture. After mastering the French alphabet and numbers, students study French culture, events, and people. By the end of the course, students have a foundation in study of French, are able to engage in French conversation, and have built a solid foundation for further French language study.

### **French II**

Grade 9-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: French I

In French II, students continue their virtual tour through France and other French-speaking countries and regions. This second-level French course takes a historical perspective in teaching the language, covering historical events and historical figures. By the end of this course, students have gained a deeper knowledge of and appreciation for the French culture and language.

### **French III**

Grade 9-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: French II

This course continues to build students' vocabulary, grammar, and communication skills with the objective of improving student achievement in reading, writing, and speaking French. Students apply what they have learned in previous French courses to French conversation. At the end of this course, students are able to express themselves in French.

### **French IV**

Grade 10-12    1.0 Credit    1 Year    Weight 1.0

Prerequisite: French III

In this level four French course, students apply the knowledge they gained in previous French courses to become true Francophones. Students explore exciting eras of French history, from the Crusades to the Renaissance to modern day, learning about famous authors and historical figures along the way. The course provides students with an advanced knowledge and deep appreciation of the French language and culture. At the end of this course, students are able to speak, read, and write in French with basic fluency.



**German I (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: N/A

German I is a comprehensive and engaging look at the German language and culture and focuses on the most essential information needed to communicate in German. After mastering the German alphabet and numbers, students study German culture, events, and people. By the end of the course, students have a foundation in the study of German and can engage in conversational German.

**German II (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: German I

Building upon the content learned in German I, students are immersed in the language, while learning cultural aspects of German-speaking countries. The course emphasizes increasing students' skills in understanding spoken German, and writing, reading, and speaking in German. German II provides a comprehensive review of German grammar while improving students' vocabulary skills. At the end of this course, students have a knowledge of and appreciation for the German people and language.

**Spanish I (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: N/A

This introductory course provides a solid foundation for students to build proficiency in listening, speaking, reading and writing in Spanish, and provides students with basic skills and contextual information for using Spanish. Each unit presents new information including useful vocabulary and grammatical structures, and introduces relevant cultural information. At the end of this course, students have the basic skills and contextual information required for using Spanish in their professional and daily lives, and when traveling abroad.

**Spanish II (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Spanish I

In Spanish II, students are immersed in the Spanish language and in the cultural aspects of Spanish-speaking countries. Students build on what they learned in Spanish I, with a study of Spanish grammar and emphasis on increasing their skills in listening, writing, reading, and speaking in Spanish. At the end of this course, in addition to improving their Spanish language skills, students have a knowledge of and appreciation for the culture of Spanish-speaking countries, including the events and people that have impacted its growth.

**Spanish III (CAOLA)**

Grade 9-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Spanish II

In this level three Spanish course, students apply what they learned in previous courses to conversational Spanish. Students explore cultural aspects of Spanish-speaking countries ranging from schools and careers to sports and authors. At the end of this course, students have improved Spanish language skills, and can express themselves in Spanish conversation.

**Spanish IV (CAOLA)**

Grade 10-12   1.0 Credit   1 Year   Weight 1.0

Prerequisite: Spanish III

From the Caribbean to South America, and Mexico to Spain, students continue their exploration of Spanish and Latin American language and culture. The course provides students with an advanced knowledge and deep appreciation of the many Spanish-speaking peoples and countries around the world. At the completion of this course, students will have gained the knowledge and skills to speak, read, and write in the Spanish language with basic fluency.

# Health and Physical Education

## **Fitness (CAOLA)**

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

This Fitness course is all about the latest ways to lead an active, healthy life. The course provides up-to-date information to help students establish healthier lifestyles and a better understanding of the close relationship between physical activity, nutrition, and overall health. This course supports and encourages students to develop an individual optimum level of physical fitness, acquire knowledge of physical fitness concepts, and understand the importance of a healthy lifestyle. At the end of this course, students have knowledge of and appreciation for fitness and its impact on everyone.

## **Health (CAOLA)**

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

This course is organized as a journey through health and wellness today. Today, health no longer means just the absence of illness; health also refers to the overall well-being of your body, your mind, and your relationships with others. The course shows students how to lead healthy lives, and includes such topics as disease, mental health, drug use, and reproductive health. At the end of this course, students have knowledge of and appreciation for health and wellness and its impact on everyone.

## **Pennsylvania High School Physical Education (CAOLA)**

Grade 9-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: N/A

What does it mean to be healthy and fit? How can physical activity help an individual to become healthy and fit? This course allows students to become acquainted with different types of movements, and enables them to understand how they're used within different instances of physical activity, while working toward their own, personal, physical activity goals. The course will encourage students to reach out into the community for examples of physical activities, and try their luck with participating in these activities which will be used in an innovative, hands-on, assessment style. This course is personalized to the likes, dislikes, and performance of each individual student, and will encourage students to reflect on accomplishments and struggles as a method for improvement and success. On their journey, students will understand the connection between fitness and proper nutrition, and will get involved in group and team sports, as well as those that can be completed independently. How to practice good sportsmanship, methods used to help students with getting along with others, and different fitness components will also be addressed. The course touches

upon health basics that affect physical activity, and address the sport science related principles that pertain. The course closes by enabling students to take a look at their own personal accomplishments, as it is encouraged for them to keep a fitness log, and the relationship between the value of physical activity and lifelong fitness is explained.

# Arts Electives

Students are required to take at least one live art elective as a graduation requirement.  
Please see the counselor for more information.

## **Music Elective – Stagecraft and Performance**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

This course offers a detailed study and exploration of how to provide an engaging music performance for an audience. How well you sing or play an instrument is crucial, but so is how you look, move, and visually express the music that you are performing. Topics include solo performance techniques, performing with an ensemble, creating an exciting set list, and creating an engaging stage environment.

## **Music Elective – Making the Band**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

This course will explore what it takes to produce and release music in today's industry. Students will get hands-on experience either performing in a recording studio environment or being the one(s) recording the musicians. Topics for exploration will be recording studio software, equipment, techniques, and processes; promoting and merchandising your music; and releasing/publishing your music.

## **Dance Elective – Body Conditioning**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

This class is designed as an introduction to basic body conditioning techniques including Pilates, Yoga, and Gyrokinesis as well as more aerobic based techniques. The goal is to increase overall flexibility and strength, while gaining an understanding of the major muscle groups and joints in order to avoid injury.

### **Dance Elective – Musical Theatre**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

This class is designed as an introduction to basic musical theater dance steps, gestures and choreography of Broadway's best musicals. Dance techniques studied will include classical jazz, modern, ballet/lyrical, social dance and elements of tap. Musical theatre dance history, staging, study of landmark choreography and creative student composition will also be explored.

### **Film & Video Elective – Television Production and the Morning Announcements**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

This course will focus on the basics of video and television production. Students in this course will create daily and weekly video announcements for the school at large.

### **Film and Video Elective – Photography (Traditional to Digital)**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

Looking at photography as an art form, students learn and use composition rules to create a series of photographs, culminating in a personal theme. Techniques include Digital Photography manipulation with Adobe Photoshop, Optical distortion and manipulation, Digital and Analog 35 creation of a Harris Shutter Effect, Original Collage Photography, Handmade Cyanotypes, and Black and White negative processing and scanning. Students are not required to have a professional camera, but are urged to have a camera available for shooting photos outside of class. Various arts photographers will be observed and their styles are occasionally incorporated into the various projects.

### **Theatre Elective – Comedy Improvisation**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

In this course, students explore the fundamentals of improvisation. Particular focus is paid to numerous exercises and games for the purposes of engaging in group warmups, shortform improv, and longform improv. Additional work is focused on analyzing sketch comedy, improv comedy, and stand-up comedy from popular culture. Motivated classes have the option of carrying this

introductory training forward to the development of a troupe, marketing strategies, and a final show performed for a live audience.

### **Theatre/Communications Elective – Yearbook**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: Students must obtain a recommendation from academic teachers and major art area teacher.

In this entry level graphic design course, students will work independently and collaboratively to create our CASA School Yearbook. Assignments are built to introduce design thinking, critical discussion, and personal decision. Students will need to write, edit, design, photograph, and promote events/fundraisers for the Yearbook. A few students are needed from each discipline.

### **Visual Art Elective – Introduction to Mixed Media**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

In this hands-on mixed media course students will be introduced to process based artwork. Students will experiment and create using sewing, dyeing, book making, calligraphy, graphic design, printmaking, papermaking, drawing, and painting. Contemporary and historical art exemplars will be used to emphasize the incredible diversity of styles and expressiveness that can be achieved with different media. At the end of this course students will have a large sample portfolio of different media.

### **Visual Art Elective – Painting on the Brink**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

In this course, we will investigate abstract painting. Each week we will explore different themes designed to embrace failure and trade polished products for process based work. Students are encouraged through readings, artist presentations, and local gallery visits-to develop their own personal approach to abstract painting. Students will also learn about painting tools, basic color-mixing, and artistic voice. Together we will find and push the limits of painting.

### **Creative Writing Elective – From Page to Stage: The Art of Performance Poetry and Urban Storytelling**

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

This course will strengthen students' public speaking skills through the study of spoken word poetry and urban storytelling. These grass roots arts movements rip words off of the pages of the elite and place them in the mouths of a diverse group of regular people. This course will explore the history of spoken word, slam poetry and urban storytelling. Students will learn how performance techniques influence word choice. They will learn the transferrable skill of public speaking and how a strong performance can lead to strong book sales.

### **Creative Writing Elective – The Art of Protest**

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

For centuries humans have used art in its many forms to highlight deep emotions, faith and the beauty of nature. Ancient cultures would create and use their arts as an expression of identity. In today's political world, different movements have expressed their social movement identities through painting, poetry, dance and other art forms. In this class we will explore the art of social protest movements that help mobilize and organize folks for a common cause.

## **Internship Program**

### **Internship**

Grade 12 .25 – 2 Credits Semester Weight 1.0

Students who have attained most of their credits by Grade 12 may participate in the internship program. This program provides the student with real-world work experience. The student would be responsible for working with the program coordinator to set-up an internship experience and then would need to complete the program manual requirements. Internship students are responsible for: a weekly time card; a weekly log of activities, experiences, and reflections; quarterly goals; evaluation by their mentor; and a culminating oral presentation about their internship. Any interested student should see Mrs. Rhinehart or Mrs. Baker with questions.



## **Additional CAOLA Electives**

### **Introduction to Office Applications (CAOLA)**

Grade 10-12   1 Credit      1 Year      Weight 1.0

Microsoft Office applications are integral to both school and career. In this course, students learn the basics of the following Office Applications: Microsoft® Word, Excel®, Access®, and PowerPoint®. Students create, save, and customize Word documents in order to meet their own needs and the requirements of class projects and assignments. Students create and customize Excel workbooks to organize data. Students produce an Access database and use it to store and track information. Finally, students design PowerPoint presentations for both school and personal use. Throughout this course, students use each application in detail and practice how to use the application in a variety of situations.

### **Career Explorations (CAOLA)**

Grade 11,12   .25 Credit      1 Quarter      Weight 1.0

Prerequisite: N/A

How do you decide what type of career to pursue? What steps can you take to get a job in your desired field? Career Explorations provides students with employment data and career resources to analyze job opportunities and prepare for their careers. Students learn about careers and the relationships between education, career, and earning potential. Students then match their interests with career opportunities and build a career map. The course defines essential professional skills such as communication, teamwork, organization, and leadership. Lessons also include explanations of personal attributes including flexibility, responsibility, and dependability. At the end of the course, students explore networking, resumes, using social media, and how to apply for jobs and prepare for interviews. This course is required for all 10<sup>th</sup> grade students starting the 2019-2020 school year.

### **Internet Safety (CAOLA)**

Grade 9-12   .25 Credit      1 Quarter      Weight 1.0

Prerequisite: N/A

Keeping yourself safe when you're using the Internet should be a high priority. Have you ever provided information to a website that you didn't know or trust? Do you know who is able to view the personal information that you post about yourself on social media sites? Have you ever shopped online? Heard of someone who has experienced identity theft? Are you able to determine the best places to acquire accurate, reliable information to use in a research paper? In Internet Safety, you'll learn how to keep yourself safe in these and many other situations that may arise online. You will learn how to think critically about what constitutes appropriate behavior online and expand the range of your online interactions. In the beginning of the course, you will identify safety precautions

for online communication, learn about ways to share content responsibly, and discover how to keep your accounts safe from identity theft and viruses. The course addresses virtual citizenship, defines cyber-bullying, and encourages you to consider the consequences of your online interactions. Lessons also address reporting online abuse, phishing, plagiarism, copyright, and fair use. The course ends by explaining how to recognize quality websites for research, safely use social networking sites, and buy and sell items online.

### **Life Skills (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Life Skills is a comprehensive career-development course for high school students making the transition to life after high school. The course shows students the steps for choosing a career, conducting a job search, selecting the right college, applying to college, and getting financial aid. This course prepares young adults for a successful life after high school, from maintaining a healthy body and a safe home to finding and keeping a job. At the end of this course, students have a knowledge of and appreciation for these important life skills.

### **Personal Finance (CAOLA)**

Grade 10-12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Introduction to Personal Finance provides students with a foundation for understanding personal budgeting and long-term financial planning. Students compare and contrast types of financial institutions, learn how to open a bank account and reconcile a monthly bank statement, and understand the importance of establishing a savings account. Students explore investments, taxes, and debt, and complete activities to develop and balance a budget. Lessons also explain credit scores and suggest ways to maintain a healthy credit score. The course also looks to the future with information about long-term financial planning and planning for large expenditures such as houses, cars, and higher education.

## Arts & Communications Pathway Electives

### **Music Theory and Appreciation (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Are you a beginning musician? Are you someone who once upon a time learned to play an instrument or sung in a chorus or church choir? Maybe you just enjoy watching YouTube videos and listening to your favorite songs. In Music Theory and Appreciation you will immerse yourself in the study of how music works. Students will develop their functional understanding of music through listening exercises, drawing and identifying notation, creating basic compositions, and analyzing music samples. In the second part of the course, students shift their focus to a more historical analysis of Western music. They survey the development of music beginning in ancient Greece and end with modern western music. Students learn to distinguish music from a vast collection of musical time periods, composers, and contrasting musical styles and genres. By the completion of this course, students have earned a strong foundational understanding of music, preparing them to learn how to play an instrument or continue to more advanced music studies.

### **Advanced Music Theory (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

In this course, students with more experience in playing an instrument or singing will be immersed in a detailed study of the structure of music for both composition and performance. The course is designed to provide a comprehensive and engaging look at musical notation and tendencies for tonal harmony. Students learn about various aspects of music theory, including music written on multiple lines or parts, in multiple clefs, and in challenging key and time signatures. Students use their command of 'functional harmony' to not only provide Roman numeral analysis for a wide range of musical examples but will also be able to enlist new skills to re-harmonize and transpose melodies and accompaniments. At the completion of this course, students will have mastered challenging compositional concepts and skills and have gained a deeper knowledge of and for music theory.

### **3D Modeling A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Business, Finance, & Information Tech; Engineering & Industrial Tech

Are you interested in a career in technology? Are you curious about working in fields like virtual

reality, video game design, marketing, television and motion pictures, or digital imaging? If so, this course in 3D Modeling is a great place to start as it is the foundation for all these career paths. Gain a deeper understanding of graphic design and illustration as you use 3D animation software to create virtual three-dimensional design projects. Hone in on your drawing, photography, and 3D construction techniques and develop the skills needed to navigate within a 3D digital modeling workspace. This course is an excellent introduction to careers in the fast-growing field of technology and design. Required materials: Compatible operating system such as Windows Vista or above, Mac OSX 10.6 or above, or Linux

### **3D Modeling B: Rendering Your Creativity (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: 3D Modeling A

Additional Pathways: Business, Finance, & Information Tech; Engineering & Industrial Tech

Building on the prior prerequisite course, students will delve deeper into the complex world of 3D modeling. Students will explore more advanced modeling principles, such as geometrics, rendering, lighting, shading, and environmental models. Students will also learn to create and build an e-portfolio while expanding industry knowledge which is then applied to developing a future career in 3D modeling. Required materials: compatible operating system such as Windows Vista or above, Mac OSX 10.6 or above, or Linux

### **Animation A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Do you wonder what it would be like to create the next blockbuster animated movie or do you want to make the next big video game? Do you have an eye for drawing, technology, and timing? If so, Animation is the course for you! You will learn how to use animation tools to conceptualize and bring your creations to life. You'll learn the ins and outs of creating 2D and 3D animation, from start to finish. You'll even begin working on our own design portfolio and get hands on experience with creating your own animation projects. Learning about Animation could lead to a thriving career in the growing world of technology and animation.

### **Animation B: Animating Your Creativity (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Animation A

Additional Pathways: N/A

Building on the prior prerequisite course, students will immerse themselves in the intricacies of animation and elevate their skills. Diving into modern animation and modeling techniques, students

will learn about the use of perspective, methods of movement, and cohesive narratives to fully implement the animation process from start to finish. Finally, students will create a portfolio and explore the various careers in the animation industry.

### **Art History A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Who do you think is the greatest artist of all time? Maybe Leonardo da Vinci? Michelangelo? Maybe a more modern artist like Claude Monet or Pablo Picasso? Or is it possible that the greatest artist of all time is actually someone whose name has been lost to history? In Art in World Cultures, you'll learn about some of the greatest artists in the world while creating your own art, both on paper and digitally. This course explores basic principles and elements of art and teaches you how to critique different art works art. And along the way, you will get to discover some traditional art forms from various regions of the world including the Americas, Africa, and Oceania.

### **Art History B: Art in World Cultures (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Art History A

Additional Pathways: N/A

Building on the prior prerequisite course, students will further their knowledge of important periods and movements in art by studying works from the Renaissance, neoclassical, romantic, and modern eras. Students will analyze the social, cultural, political, and environmental factors that influence these periods as well as focus on Native American, South American, African, and Oceanic art. Using these cultures as a foundation, the student will apply their knowledge to further cultural and artistic understanding.

### **Fashion and Interior Design A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Do you have a flair for fashion? Are you constantly looking for new ways to decorate or design your room? If so, Fashion and Interior Design is the course for you. Explore the world of design and begin to understand the background and knowledge needed to develop a career in this exciting field. Try your hand at designing through a project-based process, learning how color, composition, and texture can all affect great aesthetics. You'll develop the essential communications skills necessary to build a successful business and begin to develop the kind of portfolio that will lead to future career opportunities. Perhaps it's time to get your stylish foot in the door? Required

materials: sewing machine and cloth

### **Fashion and Interior Design B: Planning Your Vision (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Fashion and Interior Design A

Additional Pathways: N/A

Building on the prior prerequisite course, students will engage in fashion and interior design projects where diligence in selecting materials and supplies, applying a cost analysis, and budget planning will be exercised. Students will also actively participate in the decision-making and planning processes to execute their vision. Finally, students will explore decorating and furnishing styles, eco-friendly considerations, and the application of principles and elements of design to interior decorating. Students will apply their creativity in a constructive manner! Required materials: sewing machine and cloth

### **Journalism A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Are you a storyteller at heart? Are you always the first one to know what's going on at school or in your town and excited to share the latest breaking news? If so, you are the kind of person every online, print, and broadcast news outlet is searching, and Journalism A: Introduction is the perfect course for you! Explore the history of journalism and see how social media and the digital world has changed the way news media operates. Learn the basics of press law as well as the code of ethics journalists should follow. Finally, understand how to make your writing and speaking more powerful, and discover the importance of pictures and images when telling a story.

### **Journalism B: Investigating the Truth (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Journalism A

Additional Pathways: N/A

If you want to turn your writing, photography, and collaborative skills into an exciting and rewarding career, Journalism B: Investigating the Truth is where to begin. Learn how to write a lead that grabs your readers, discover the roles of sources and how to interview them effectively, and explore the best options for researching your story in a digital world. You will also understand the role editors and producers play in the revision process, learn how to prepare your posts for publication, and how to follow the publication process - from the flow of a work day to the layout of a newspaper or a news broadcast.

### **American Sign Language A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Did you know that American Sign Language (ASL) is the third most commonly used language in North America? American Sign Language A: Introduction will introduce you to vocabulary and simple sentences, so that you can start communicating right away. Importantly, you will explore Deaf culture – social beliefs, traditions, history, values and communities influenced by deafness.

### **American Sign Language B: Learn to Sign (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: American Sign Language A

Additional Pathways: Human Services

The predominant sign language of Deaf communities in the United States, American Sign Language is a complex and robust language. American Sign Language B: Learn to Sign will introduce you to more of this language and its grammatical structures. You will expand your vocabulary by exploring interesting topics like Deaf education and Deaf arts and culture.

### **African American History A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Over the course of U.S. history, how have African Americans helped shaped American culture? This African American History course answers that question by tracing the accomplishments and obstacles of African Americans beginning with the slave trade on up to the modern Civil Rights movement. What was it like during slavery, or after emancipation, or during the years of discrimination under Jim Crow? Who were some of the main figures who have shaped African American history? In this course, you'll learn about the political, economic, social, religious, and cultural factors that have influenced African American life, come face to face with individuals who changed the course of history, and explore how the African American story still influences current events today.

### **African American History B: From Reconstruction to Today (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: African American History A

Additional Pathways: N/A

Building on the prior prerequisite course, students will come face-to-face with individuals who changed the course of African American history and learn more about slavery, racism, and the Civil Rights Movement. By analyzing the effects of segregation, violence and justice in the Jim Crow era, students will understand the causes of the race riots and the Civil Rights Movement. Students will also explore how the history and experience of African Americans continues to influence current events today.

### **History of the Holocaust A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

“Never shall I forget that night, the first night in camp, which has turned my life into one long night, seven times cursed and seven times sealed.” Elie Wiesel, a Holocaust survivor, wrote these words about his experiences in a Nazi concentration camp. History of the Holocaust will take you through the harrowing details of anti-Semitism, the power of the Nazi party, the persecution of European Jews and other groups, and the tremendous aftermath for everyone involved in World War II. You’ll explore the causes of the Holocaust, the experiences of Jews and other individuals during this time, and what has been done to combat genocide since WWII. “For the dead and the living, we must bear witness.”

### **History of the Holocaust B: Enduring Legacy (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: History of the Holocaust A

Additional Pathways: N/A

Building on the prior prerequisite course, students will examine the aftermath of the Holocaust and its effect on the world. Students will explore the persecution of non-Jewish victims during the Holocaust, the Nazi party’s attempt to cover up their crimes, and the responses of liberators to the existence and conditions in the camps. In addition, students will examine the Nuremberg trials and the subsequent changes to international law and medical ethics. Finally, students will learn about other genocides and ways that they can get involved to raise awareness and prevent future tragedies.

### **Mythology and Folklore: Legendary Tales (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Since the beginning of time, people have gathered around fires to tell stories of angry gods,



harrowing journeys, cunning animals, horrible beasts, and the mighty heroes who vanquished them. Mythology and folklore have provided a way for these colorful stories to spring to life for thousands of years. *Mythology and Folklore: Legendary Tales* will illustrate how these famous anecdotes have helped humans make sense of the world. Beginning with an overview of mythology and different types of folklore, you will journey with age-old heroes as they slay dragons, outwit gods, defy fate, fight endless battles, and outwit clever monsters with strength and courage. You'll explore the universality and social significance of myths and folklore and see how these powerful tales continue to shape society even today.

**Philosophy: The Big Picture (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Go on an exciting adventure covering over 2,500 years of history! Along the way, you'll run into some very strange characters, like the dirty barefoot man who hung out on street corners pestering everyone with questions, or that eccentric fellow who climbed inside a stove to think about whether he existed. Despite their odd behavior, these and other philosophers of the Western world are among the world's most brilliant and influential thinkers and originated the fundamental ideas of Western civilization. *Philosophy: The Big Picture* asks some of the same questions these great thinkers pondered, so by the time you've "closed the book" on this course, you will better understand yourself and the world around you—from atoms to outer space and everything in between.

**Women's Studies: A Personal Journey Through Film (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Maybe you grew up watching movies with female characters like Cinderella, Belle, Snow White, or Ariel. Maybe you've wondered why there are stereotypes about women being bad drivers or ignorant about sports. Maybe you want to know about feminism and the women's movement. *Women's Studies: A Personal Journey Through Film* can help you answer these questions. Though it focuses on the experience of women, it's appropriate for anyone who wants to learn to critically examine films while learning about the history of the women's movement and how gender, race, and social class influence us.

**World Religions A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

From Taoism, to Islam, to Christianity, religion inevitably affects us all in some way. On one level, religion can help us commune with and honor our spiritual natures, but it can also divide people and create great strife in the world. World Religions A: Introduction will explore the various characteristics of faith and introduce the fundamentals of the major religions, including Judaism, Islam, Christianity, Buddhism, Confucianism, Hinduism, Shintoism, and Taoism. You'll trace how these powerful faiths have influenced cultures over thousands of years and helped to shape the face of humanity. After this course, you'll have a clearer understanding of how religion continues to affect the larger world.

**World Religions B: Exploring Diversity (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: World Religions A

Additional Pathways: Human Services

Building on the prior prerequisite course, students will explore even more religions from across the world! Students will discover the basic principles, sacred texts, practices, and rituals of Islam, Confucianism, Shintoism, and Taoism. Finally, students will learn about religion in the 21st century and the role of religion in global and social politics. The importance of religious tolerance is also discussed, giving students a thorough introduction to world religions.

## **Business, Finance, & Information Technology** **Pathway Electives**

### **Advertising and Sales Promotion (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

What comes to mind when you think of ‘marketing’? Perhaps a familiar television jingle plays in your head? Or maybe you think of those irritating sales phone calls? There’s no denying the sheer magnitude and power of the marketing industry. Every year companies spend approximately \$200 billion promoting their products and services—and that’s just in the United States alone! You may be familiar with being on the receiving end marketing, but what’s it like on the other side? In Advertising and Sales Promotions, you’ll see how these marketing campaigns, ads, and commercials are brought to life and meet some of the creative folks who produce them. You’ll learn about different marketing career opportunities and discover ways to be part of this exciting, fast-paced industry.

### **Entrepreneurship A: Starting Your Business (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

What does it really take to own your own business? Does the sound of being your own boss make you feel excited or anxious? Either way, Entrepreneurship A: Starting Your Business will get you started in the right direction. This course explains the ins and outs of such an enterprise, giving you the confidence needed to be your very own boss. You will discover what is needed to operate a personal business from creating a plan, generating financing, and pricing products to marketing services and managing employees. If you’ve ever dreamed of being a true entrepreneur but feel daunted by the prospect, this is your chance to learn all you need to know.

### **Entrepreneurship B: Starting Your Business (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Entrepreneurship A

Additional Pathways: Human Services

Building upon the prior prerequisite course, students will continue their path towards becoming successful entrepreneurs by learning about marketing and advertising, generating financing, pricing products, and managing employees. Students will also develop a foundation in business law and regulations, while entrenching time management and decision-making skills. This course allows for

the successful student to determine their place in business and the viability of opening their own.

### **International Business: Global Commerce in the 21<sup>st</sup> Century (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Imagine meeting with suppliers at an office in Europe while calling your saleroom that's back in Asia. Imagine investing in foreign markets and visiting partners in exotic locales. With the evolution of current technology, our world is more connected than ever before, and the business community today is larger than ever. International Business: Global Commerce in the 21st Century will demonstrate just how you can gain the knowledge, skills, and appreciation to live and work in the global marketplace. You will begin to understand how both domestic and international businesses are affected by economic, social, cultural, political, and legal factors and what it takes to become a true manager of a global business in the 21st century.

### **Sports and Entertainment Marketing A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Whether you are watching a famous athlete make an unbelievable play or witnessing a sensational singing performance, the world of sports and entertainment is never boring. Although it may seem impossible for you to be a part of this glittery world, it's not! The Sports and Entertainment Marketing field offers careers that combine entertainment with traditional marketing, but with a whole lot more glamour. Explore basic marketing principles while delving deeper into the multibillion dollar sports and entertainment industry. Learn how professional athletes, sports teams, and famous entertainers are marketed as commodities and how the savvy people who handle these deals can become very successful. This course will show you exactly how things work behind the scenes of a major entertainment event and how you can be part of the act.

### **Sports and Entertainment Marketing B: Going for Gold (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Sports and Entertainment Marketing A

Additional Pathways: Human Services

Building on the prior prerequisite course, students will further refine their marketing skills! Students will examine the channels of distribution for products as well as the promotional mixes of advertising, visual merchandising, and personal selling. Students will also explore sponsorships and endorsements, the product life cycle, the buying process, and the psychology of marketing. Lastly,

students will discover careers in sports and entertainments marketing with emphasis placed on leadership, teamwork, and time management skills.

### **Coding A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Engineering and Industrial Tech

Have you ever wanted to create your own web page or wondered how your favorite websites were built? Maybe you want to know more about how computers and technology are affecting the world around us. In Coding A: Introduction to Programming, you will explore the role technology plays in our lives as well as study the fundamentals of computer science, review hardware and software, and learn how the internet functions. You will also discover how to create and build your own website using HTML and CSS and learn basic and complex commands and sequences as you become familiar with programming languages like JavaScript and Python Programming. This course also covers data collection methods, access rights, protocols, and security.

### **Coding B: Programming (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Coding A

Additional Pathways: Engineering and Industrial Tech

Are you passionate about technology? Do you love learning how things work and are excited about the idea of further exploring the world of computer science? If you thrived in Coding A: Introduction to Programming, now is your chance to build on that knowledge with Coding B: Programming. In this course, you will continue to cultivate an understanding of programming languages and expand on website development. You will learn the difference between web development and web application development as well as further explore Advanced Python, HTML, and JavaScript. You will also examine software engineering concepts, learn more about security, privacy, and ethics in technology, and explore the wide variety of careers in computing.

### **Cybersecurity A: Foundations (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Ever wonder what it's like to be a hacker? Or think about who is trying to steal your passwords while you're shopping online using the free WIFI at your local coffee shop? Can someone be watching your personal, private information? Can anything be kept "secret" online? We depend more and more on the technologies we interact with every day. This creates the need for increased system and network security measures. And, it means we all need to know more about how to

protect valuable and vulnerable information. This course introduces you to the tools, technologies, and methods needed to protect online information and addresses how these issues are impacting safety and rights on a global and personal level. Learn what exciting career possibilities await you in the new and high-demand field of cybersecurity.

### **Cybersecurity B: Defense Against Threats (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Cybersecurity A

Additional Pathways: Human Services

Ever wonder what it's like to be a hacker? Or think about who is trying to steal your passwords while you're shopping online using the free Wi-Fi at your local coffee shop? Unmask the cybersecurity threats around you by understanding hackers and identifying weaknesses in your online behavior. Learn to avoid the various types of cyber-attacks, including those to your social media accounts, and to predict the potential legal consequences of sharing or accessing information that you do not have rights to. Dig into these crimes in depth by taking a look at cyber forensics and other cybersecurity careers. In a world where such threats have no boundaries, cybersecurity will undoubtedly play an increasingly larger role in our personal and professional lives in the years to come.

### **Game Design A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Arts and Communications

Are you a gamer? Do you enjoy playing video games or coding? Does the idea of creating and designing your own virtual world excite you? If so, this is the course for you! Tap into your creative and technical skills as you learn about the many aspects involved with designing video games. You will learn about video game software and hardware, various gaming platforms, necessary technical skills, troubleshooting and internet safety techniques, and even the history of gaming. And to top it all off, you'll even have the opportunity to create your very own plan for a 2D video game! Turn your hobby into a potential career and go from simply being a player in a virtual world to actually creating one!

### **Game Design B: Building a Game (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Game Design A

Additional Pathways: Arts and Communications

We live in a technologically-advanced world where virtual reality and video games play a major role. Have you ever thought about designing your own video game? By signing up for Game Design B:

Building a Game, you will learn the skills needed to conceptualize, design, and fully create your very own video game. Explore various video game software and hardware, sharpen your coding skills, learn about game storylines, player progression, and algorithmic decision making. Learn to analyze player goals, actions, rewards, and challenges, among many other game play components. Utilize the 21st century skills of creativity, critical thinking, communication, collaboration, and technical expertise. When you sign up for Game Design B: Building a Game, you are putting yourself at the forefront of a future in technology.

## Engineering & Industrial Technology Pathway Electives

### **Chemical Engineering (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

This course offers students a comprehensive and engaging look at the field of chemical engineering. Students learn the basic concepts used in chemical engineering, including systems of units, the periodic table of the elements, molecules, compounds, bonding, temperature, and pressure. Students explore chemical systems and reactions, including stoichiometry, open and closed systems, multiple-component systems, and chemical reactions. Finally, students study gases and gas laws, pressure, systems, energy, and enthalpy. At the end of this course, students have gained knowledge of and appreciation for chemical engineering and its growing importance in today's society.

### **Computer Engineering (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

In this course, students learn the basic concepts used in computer engineering, including the basic parts of a computer, how information is quantified, organized, and used, and different types of information. Students learn about information compression and information theory, the different types of coding, the theory of sound, and how sound is converted into a signal. Finally, students learn about applications of computer engineering, including digital telephones, real-time data transmission, band limits, different types of systems, and information security.

### **Electrical Engineering (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: Algebra I

Additional Pathways: Science & Health

In this introduction to electrical engineering, students learn about basic electrical engineering concepts including an introduction to electricity, circuits, energy, work, power, the components of circuits, and some simple applications of electricity. Students explore basic circuit concepts, including series and parallel circuits, laws of electricity, and how circuits are used. At the end of this course, students have a knowledge of and appreciation for the field of electrical engineering and its many applications.



### **Mechanical Engineering (CAOLA)**

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: Algebra I

Additional Pathways: Science & Health

This course introduces students to the field of mechanical engineering and its many applications in the world today. Students learn basic mechanical engineering concepts, including systems of units, vectors, forces, moments, force systems, couples, and equilibrium problems. Students explore the methods of joints and sections, define centroids, explain distributed loads and center of mass and axes, and state the Pappus-Guldinus theorems. The course concludes with lessons on dry friction, beams, cables, load distribution, pressure, and potential energy. At the end of this course, students have a knowledge of and appreciation for the field of mechanical engineering and its importance in today's society.

### **Concepts of Engineering and Technology (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

What if you could do the impossible? Engineers understand a lot of things, but the word impossible definitely isn't one of them. Through Concepts of Engineering and Technology, you'll learn how the momentum of science is continually propelling engineers in new directions towards a future full of insight and opportunity. This course explores the different branches of engineering and how problem-solving, sketching, collaboration, and experimentation can change the very fiber of our human lives. This ever-increasing knowledge can also lead to serious ethical dilemmas and the need to discuss where the boundaries of science lie (or even if there should be boundaries). By examining astounding engineering feats and complex ongoing issues, you, too, will begin to question whether the word impossible really exists.

### **Manufacturing A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Think about the last time you visited your favorite store. Now picture the infinite number of products you saw. Have you ever wondered how those things made it to the shelves? Whether it's video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In Manufacturing: Introduction, you will learn about different types of manufacturing systems as well as career opportunities, including engineers, technicians, and supervisors. As a culminating project, you will plan your own manufacturing process and create an entirely original product! If you thought manufacturing meant mundane assembly lines, this course will show you how exciting, creative, and practical this industry can be.

**Manufacturing B: Product Design and Innovation (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Manufacturing A

Additional Pathways: N/A

Building on the prior prerequisite course, students will be introduced to systems and manufacturing engineering and learn to design and produce their own engineering drawings. Safety in manufacturing, workers' rights, and government regulations are discussed as well as specializations in manufacturing. Finally, in the final project, students will plan their own manufacturing process for a new product or invention!

## Human Services Pathway Electives

### **Early Childhood Education A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

As children, we see the world differently than we do as teenagers and adults. It is a world full of magical creatures and strange, exciting things. In Early Childhood Education A: Introduction, you'll learn how you can have an impact on the most important years of human development. Explore child-care roles and responsibilities and discover why early childhood education matters. You'll learn the rules and regulations of child-care facilities, how to maintain a safe, clean, and healthy environment, and understand how to plan meals and menus for children. You will also study the various stages of early childhood development, including physical, cognitive, language, and social growth and how to recognize developmental milestones and delays.

### **Early Childhood Education B: Developing Early Learners (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Early Childhood Education A

Additional Pathways: N/A

What makes childhood such a wondrous time of learning and exploration? What can caregivers do to encourage this? In Early Childhood Education B: Developing Early Learners, you will learn more about the childhood experience and how to create fun, stimulating, and educational environments for children. Discover how to get children excited about learning and, just as importantly, to feel confident about their abilities. Learn to effectively communicate with children, how to create good behavior, and how to discipline youth of different ages. You will also learn how to encourage language development in young children and how to create a literacy-rich environment. Finally, build an educational plan that will help you meet your career goals and explore professional development opportunities that will assist you on your path.

### **Culinary Arts A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

Food, glorious food! It both nourishes and satisfies us, and it brings people together through preparation, enjoyment, and celebration. If you've ever wanted to learn more about cuisine and how your creativity and appreciation can be expressed by preparing food, Culinary Arts A: Introduction is perfect for you. Learn about the history and development of the food service industry, the basics of

nutrition and different dietary needs, and laws and regulations governing food service. You will also develop fundamental culinary arts skills, including how to read and follow recipes, understand weight and measurements used in the food service industry, and how to be safe and sanitary in the kitchen.

### **Culinary Arts B: Exploring Careers in Culinary Arts (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Culinary Arts A

Additional Pathways: Science & Health

Whether you aspire to be a world-class chef or just want to learn the skills needed to create your own dishes, Culinary Arts B will help you build a strong foundation and grow your knowledge of this exciting industry. In this course, you will explore baking and desserts, learn how to prepare proteins, and study nutrition and safety in the kitchen. You will also enhance your understanding of sustainability in the food industry, learn to prepare meals from a global perspective, and dissect the business of cooking, from managing a kitchen to successfully running a catering company. Discover the delights that await you on this delicious culinary adventure!

### **Hospitality and Tourism A: Traveling the Globe (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Business, Finance, & Information Tech

Think about the best travel location you've ever heard about. Now imagine working there. In the 21st century, travel is more exciting than ever, with people traversing the globe in growing numbers. Hospitality and Tourism A: Traveling the Globe will introduce you to a thriving industry that caters to the needs of travelers through managing hotels, restaurants, cruise ships, resorts, theme parks, and any other kind of hospitality you can imagine. Operating busy tourist locations, creating marketing around the world of leisure and travel, spotting trends, and planning tasteful events are just a few of the key aspects you will explore in this course as you locate your own career niche in this exciting field.

### **Hospitality and Tourism B: Hotel and Restaurant Management (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Hospitality and Tourism A

Additional Pathways: Business, Finance, & Information Tech

If you love working with people, a future in hospitality may be for you. In Hospitality and Tourism B: Hotel and Restaurant Management, you will learn about what makes the hotel and restaurant industries unique. Learn about large and small restaurants, boutique and resort hotels, and their day-to-day operations. Evaluate the environment for these businesses by examining their customers and their competition. As well, you will discover trends and technological advances that makes each

industry exciting and innovative. In Part 1, you can explore a variety of interesting job options from Front Desk and Concierge services to Maître d and food service.

### **Cosmetology A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Arts & Communications

We all want to look our best, but did you know there is actually a science behind cutting your hair and painting your nails? In Cosmetology A: Introduction, you will learn all about this often entertaining field and how specialized equipment and technology are propelling our grooming into the next century. Just like all careers, cosmetology requires certain skills and characteristics, all of which are thoroughly explored in this course. You will learn about various beauty regimes related to hair, nails, skin, and spa treatments, and discover how to create your own business model quickly and efficiently while still looking fabulous, of course!

### **Cosmetology B: Cutting Edge Styles (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Cosmetology A

Additional Pathways: Arts & Communications

Building on the prior prerequisite course, students will learn about creating a thriving cosmetology business. Focusing on foundational business strategies, students will explore potential types of clients, customer service practices, marketing, advertising, and how to build a business from the ground up. By examining the tools, equipment, technology, and safety, students will become familiar with salon practices and the standards of care clients expect.

### **Personal Psychology A: The Road to Self-Discovery (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

Have you ever wondered why you do the things you do? Have you asked yourself if self-knowledge is the key to self-improvement? Are you interested in how behavior changes as we age? Psychology can give you the answers! In Personal Psychology A: The Road to Self-Discovery, you will trace the development of personality and behavior from infancy through adulthood. You will come to learn more about perception and consciousness and better understand the role of sensation. Are you ready to explore the world of human behavior? Come explore all that psychology can offer to help you to truly understand the human experience.

### **Personal Psychology B: Living in a Complex World (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Personal Psychology A

Additional Pathways: Science & Health

Why do you sometimes remember song lyrics but can't remember where you left your phone, your keys, or even your shoes? How does language affect the way we think? Why is your personality so different from (or so similar) your brother's or sister's personality? Personal Psychology B: Living in a Complex World will you to explore what makes you 'you.' Why do some things motivate you more than others? How can you determine your IQ? If you've ever wanted to dive right into the depths of who you are and how you got to be you, jump on board and start your exploration now

### **Social Problems A: A World in Crisis (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

War, crime, poverty, global warming—our world often seems full of dire warnings and predictions. How can we make sense of it all and still dare to step outside each day? Social Problems A: A World in Crisis will explore some of the biggest challenges facing our world today and prepare you to tackle them head-on. You'll learn what led to these social problems, what effects they have on our lives and societies, and what possible solutions exist for solving them. Whether you want to save the world from the next pandemic or better understand the effects of the media on society, this course will help you develop a plan of action!

### **Social Problems B: Crisis, Conflicts, and Challenges (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Social Problems A

Additional Pathways: N/A

It may seem like we live in a sometimes scary and ever-changing world. Everywhere we look—from the homeless living on the streets, to world-wide health epidemics, to the often negative effects of our global world—problems seem to appear at every corner. In Social Problems B: Crisis, Conflict, and Challenges, you'll explore more of the challenges we face and learn what we can do to reduce the effects of these conflicts and problems. From drug abuse to terrorists to the changing nature of communities in our digital world, we can better face and solve these problems when we have a deeper understanding of their causes and influences on our lives.

### **Sociology A: The Study of Human Relationships (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Human beings are complex creatures; however, when they interact and begin to form relationships and societies, things become even more complicated. Are we more likely to act differently in a group than we will when we're alone? How do we learn how to be "human"? Sometimes it can feel as if there are more questions than answers. Sociology A: The Study of Human Relationships seeks to answer these questions and many more as it explores culture, group behavior, and societal institutions and how they affect human behavior. You'll learn how social beliefs form and how this shapes our lives. How does this happen? Join us and find out!

### **Sociology B: Your Social Life (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Sociology A

Additional Pathways: N/A

Why do people disagree on so many big issues? Where do culture wars come from? Maybe you've wondered this as you've looked through your social media feed or read the latest online article about groups fighting over different social issues. Sociology B: Your Social Life takes a powerful look at how social institutions like families, religion, government, and education shape our world and how collective behavior and social movements can create change. Although the reality of the battles isn't always pretty, gaining a clearer picture of the different sides can help you better understand how our lives are shaped by entertainment, social institutions, and social change.

### **Anthropology A: Uncovering Human Mysteries (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

What makes us human? Is it our ability to use language? Is it our abstract thinking skills or our use of tools and technology? In Anthropology A: Uncovering Human Mysteries you will trace the history of homo sapiens and explore our evolutionary trail. This course offers an anthropological lens to observe our movement from cave dweller to modern human. It sheds light on how we forged our way and developed all of the things that make us human, such as our cultures, languages, and religions. We, as humans in the 21st century, are highly intelligent, innovative people with astounding technological ability—how did we get this way?

### **Anthropology B: More Human Mysteries Uncovered (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Anthropology A

Additional Pathways: Science & Health

How does your culture influence you? Find out how different locations shape various cultures and, in turn, how these cultures shape people's lives around the world—from the jungles of the Amazon to the islands of Indonesia. Anthropology B: More Human Mysteries Uncovered provides a fascinating look at this puzzle of culture. Many of our ancient cultures and languages were shaped by the geographical locations of our ancestors, and in this course, you will begin to visualize new ideas about how ancient cultures flourished through examining their views on life, death, art, and survival. In looking back and learning about cultures through the ages, we are better equipped to understand the world around us today.

### **Careers in Criminal Justice A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Most of us have watched a sensationalized crime show at one time or another, but do we really know how things work behind those dreaded prison bars? Do we really understand all the many factors in our justice proceedings? The criminal justice system is a very complex field that requires many seriously dedicated people who are willing to pursue equal justice for all. The Careers in Criminal Justice course illuminates what those different career choices are and how the juvenile justice system, the correctional system, and the trial process all work together to maintain social order. Find out more about what really happens when the television show ends and reality begins.

### **Careers in Criminal Justice B: Finding Your Path (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Careers in Criminal Justice A

Additional Pathways: N/A

Building on the prior prerequisite course, students will explore specific careers and training opportunities within the criminal justice system. In addition, students will develop interpersonal skills, such as crisis management, conflict resolution, and working as part of a team, that contribute to success in this system. Finally, students will learn about ethics, standards of professionalism and confidentiality to form a well-balanced overview of a career in the criminal justice system.



### **Criminology: Inside the Criminal Mind (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Psychology recommended

Additional Pathways: N/A

Understanding the criminal mind is not easy. Why do certain people commit horrible acts? Can we ever begin to understand their reasoning and motivation? Perhaps. In *Criminology: Inside the Criminal Mind*, you will be given the rare opportunity to climb inside the mind of a criminal and examine the ideas and motivations at work. The mental state of a criminal can be affected by many different aspects of life—psychological, biological, sociological—all of which have differing perspectives and influences. You will investigate not only how these variables affect the criminal mind but also how the criminal justice system remains committed to upholding the law through diligence and an uncompromising process.

### **Forensics A: Introduction to Forensic Science (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Science & Health

We watch with interest as crime scenes are dramatized on television and in film, and sit on the edge of our seat as various members of the justice system solve the most baffling cases. But what about the science behind the crime? Forensics A explores the role science and technology plays in this fascinating and growing career. In this course, you'll learn the specialized skills and techniques used during a crime scene investigation and how evidence and data is expertly collected, preserved, and analyzed. With a strong focus on the innovative science used in the field as well as participation in interactive activities, you will follow the entire forensic process – from examining evidence to taking the findings to trial – and learn how the professionals are utilizing science to bring criminals to justice.

### **Forensics B: The Science of Crime (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Forensics A

Additional Pathways: Science & Health

Building on the prior prerequisite course, students will continue their experience with forensic science by examining the properties of DNA and how it is used in trials. Also, students will learn about explosion and arson evidence, the scientific method, as well as basic anatomy and genetics. Finally, the importance of applied physics and chemistry to crime scenes are studied, rounding out a comprehensive analysis of forensic science.

### **Law and Order A: Introduction to Legal Studies (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Imagine if there were no laws and people could do anything they wanted. It's safe to say the world would be a pretty chaotic place! Every society needs some form of regulation to ensure peace in our daily lives and in the broader areas of business, family disputes, traffic violations, and the protection of children. Laws are essential to preserving our way of life and must be established and upheld in everyone's best interest. In Law and Order: Introduction to Legal Studies, you'll delve deeper into the importance of laws and consider how their application affects us as individuals and communities. Through understanding the court system and how laws are actually enacted, you will learn to appreciate the larger legal process and how it safeguards us all.

### **Military Careers: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: All

Most of us have seen a war movie; maybe it had a hotshot aviator or a renegade private or a daring Special Forces operative. But outside of these sensationalized portrayals, do you really understand how the military works or what it can do for you? The military offers far more career diversity than most people imagine, and Introduction to Military Careers will provide the information you need to gain a broader understanding of how to find the right fit. You will learn about the five military branches—Air Force, Army, Coast Guard, Marines Corps, and Navy—and examine which jobs you might like to pursue. From aviation, to medicine, to law enforcement, the military can be an outstanding place to achieve your dreams in a supportive and well-structured environment.

## **Science & Health Pathway Electives**

### **Health Science A: Introduction to the Whole Individual (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Introduce your students to the rewarding and growing field of health science! Students will explore the various disciplines within the health sciences while investigating the licensing, certifications, and educational requirements to pursue a career in this area. The history of the health care, characteristics of the health system, and different stages of human development and life are discussed. Finally, students will learn how to take vital signs and practice common first-aid techniques, starting them off with the skills to make them successful in the health sciences!

### **Health Science B: The Whole Individual (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Health Science A

Additional Pathways: Human Services

Building on the prior prerequisite course, students will continue their introduction to the health care field. Beginning with teamwork and leadership skills, students will then explore communication techniques and the importance of health and safety in the work place. Finally, students will be exposed to medical ethics and legal issues as well as the influence of technology on communications and information, providing the student with foundational knowledge.

### **Nursing A: Introduction to Nursing (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Nursing is an in-demand career, perfect for someone looking for a rewarding and challenging vocation in the healthcare sector. With a strong focus on patient care, a nurse must be skilled in communication, promoting wellness, and understanding safety in the workplace. In Nursing A: Introduction to Nursing, you will explore communication and ethics, anatomy and physiology, and the practice of nursing. Learn how to build relationships with individuals, families, and communities and how to develop wellness strategies for your patients. From emergency to rehabilitative care to advances and challenges in the healthcare industry, discover how you can launch a fulfilling career providing care to others.

### **Nursing B: Developing Your Skills (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Nursing A

Additional Pathways: Human Services

Building on the prior prerequisite course, students will explore the details of being a nurse and daily life. Students will learn about emergency procedures, safety considerations, and to take vital signs. Students will also examine blood-borne and infectious diseases along with subsequent infection control and prevention techniques. Finally, the trends and challenges of nursing are discussed, giving students a thorough introduction to the realm of nursing!

### **Nutrition and Wellness A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

Have you ever heard the phrase “your body is your temple” and wondered what it means? Keeping our physical body healthy and happy is just one of the many challenges we face, and yet, many of us don’t know how to best achieve it. Positive decisions around diet and food preparation are key to this process, and you will find the essential skills needed to pursue a healthy, informed lifestyle in Nutrition and Wellness. Making sure you know how to locate, buy, and prepare fresh delicious food will make you, and your body, feel amazing. Impressing your friends and family as you nourish them with your knowledge? That feels even better!

### **Nutrition and Wellness B: Choosing Your Health (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Nutrition and Wellness A

Additional Pathways: Human Services

Building on the prior prerequisite course, students will examine the particulars of preparing healthy meals, learn about the nutritional values and benefits of various foods and basic food preparation techniques. Finally, students will explore mindful eating strategies, securing their ability to develop healthy habits for the future.

### **Forestry and Natural Resources (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Whether you are a tree hugger or not, everyone loves the beauty and serenity of a healthy forest. Our precious woodland species not only supply us with aesthetic beauty but also play a valuable role in nature. Trees uphold a great deal of our wildlife ecosystem while providing us humans with needed lumber, paper products, and even food. But these forests cannot protect themselves and depend greatly on humans for conservation. In Forestry and Natural Resources, you will learn more about this meaningful relationship and how environmental policy, land use, water resources, and wildlife management all factor into current forestry issues. After better understanding these variables and how they affect the majesty of our forests, you may just be hugging these gentle giants after all.

### **Principles of Agriculture, Food, and Natural Resources A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Did you know that the world's population could be as high as 11 billion people by the year 2050? And certainly, as our population is growing, so too are our food needs. Even today, millions of people around the world experience hunger. How can we balance growing populations and keeping everyone fed? This is where the importance of agriculture, food, and natural resources comes in! Through the study of Principles of Agriculture: Food and Natural Resources, you will gain a stronger sense of how food ends up on the plate and how we can maximize the foods and natural resources the earth provides. You'll learn more about agriculture's history, animal husbandry, plant science, and natural resources, and you'll be better prepared for your part in sustaining the world.

### **Principles of Agriculture, Food, and Natural Resources B: From Farms to Energy (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Principles of Agriculture, Food, and Natural Resources A

Additional Pathways: N/A

Building on the prior prerequisite course, students will continue their journey of agricultural, food, and natural resources awareness. Students will learn about the types of livestock and their function in agriculture as well as basic animal anatomy and breeding practices. Moving onto food processing and production, students will be exposed to current and changing food trends. Finally, power systems, key natural resources, the extraction of resources, and sustainability practices are discussed, providing a thorough introduction to this field.

### **Renewable Technologies A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Engineering & Industrial Tech

Cars that run on used vegetable oil. Electricity produced from your garbage. A windmill made from spare bicycle parts that pumps water to crops. Energy is life. So, how do we address the world's

growing concerns about energy sources? Where will it come from in the future? How can energy be something sustainable, renewable, and accessible? Renewable Technologies begins to uncover the development of new energy technologies and explores how recent approaches to generating, storing, and creating this precious resource have evolved. By gaining a larger understanding of this challenge, we, as thoughtful people, can implement real change and unlock the solution needed for a safer, cleaner, and more enduring world.

### **Renewable Technologies B: Sustainable Energy (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Renewable Technologies A

Additional Pathways: Engineering & Industrial Tech

Building upon the prior prerequisite course, this course examines the various types of renewable energies and their impact in this cutting-edge field. The harnessing of solar, wind, biofuel, geothermal, and hydroelectric energies will be analyzed, while students learn to discuss each in terms of their individual benefits and detractions. Finally, students will delve into the future of renewable technologies and how current energy habits will affect the world to come.

### **Veterinary Science: The Care of Animals (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Lions and tigers and bears (oh my!) Whether you want to step into the wild side of veterinary medicine or just take care of the furry dogs and cats down your street, Veterinary Science: The Care of Animals will show you how to care for domestic, farm, and wild animals and diagnose their common diseases and ailments. Learn how different veterinary treatments are used and developed to improve the lives of animals and, as a result, the lives of those people who treasure them. If you have always been drawn to the world of our furry, scaly, and feathered friends, this may be just the course for you!

### **Marine Science A: Introduction (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: N/A

Students will explore the development of oceans and the role water plays in shaping our environment and climate! Learners will discover the oceanic and freshwater process, changes in ecosystems, and the connection between water and weather. Students will also learn about energy in the ocean, including the principles of fluid dynamics, and the measurable properties of waves. Using scientific

inquiry, research, measurement, and problem solving, students will conduct various scientific procedures that will lead to increased knowledge about marine science.

**Marine Science B: Secrets of the Blue (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Marine Science A

Additional Pathways: N/A

Building on the prior prerequisite course, students will further explore the aquatic cycles, structures, and processes that generate and sustain life in the sea. Students will learn about the importance of adaption for survival, the role of natural selection in evolution, and how humans interact with the environment. Students are also introduced to the scientific and ethical questions that arise during advanced experiments while discovering the exciting career opportunities that exist in the world of marine science!

**Archaeology: Detectives of the Past (CAOLA)**

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Additional Pathways: Human Services

The famous Spanish philosopher and writer George Santayana once said, “Those who cannot remember the past are condemned to repeat it.” We know from studying history how true this statement is, and the age-old field of archaeology helps us to better understand, through discovery and analysis, how ancient civilizations have shaped the modern world. This fascinating course, Archaeology: Detectives of the Past, explores the various techniques, methods, and theories of this field and illustrates how archaeologists conduct their studies. What is it like to uncover precious artifacts? How are they located and preserved? Find the answer to these questions and more as you learn how ancient discoveries can unlock the secrets of a long and colorful past.



**Capital Area School for the Arts  
Charter School**