



Capital Area School for the Arts
Charter School

COURSE DESCRIPTION BOOKLET 2018-2019

www.casa-arts.org

717-732-8450

Board Approved 3-20-2018

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

TABLE OF CONTENTS

Counseling Services.....	Page 4
Graduation Requirements.....	Page 4
Progress toward Graduation and Senior Status.....	Page 4
Proficiency Courses / Experiences.....	Page 5
Changing Courses.....	Page 5
Sequential Subjects and Prerequisites.....	Page 5
Teacher Recommendations – All Major Subject Areas.....	Page 5
Summer School.....	Page 5
Advanced Placement Courses.....	Page 5
Core Arts Courses.....	Page 6
English.....	Page 9
Mathematics.....	Page 12
Science.....	Page 18
Social Studies.....	Page 25
World Language.....	Page 29
Health / Physical Education.....	Page 32
Arts Electives.....	Page 33
Additional CAOLA Electives.....	Page 36

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

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
- 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.

In accordance with new state requirements, beginning in 2018-2019, 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.

During the 2018-2019 school year, the following Keystone Exams will be given: Algebra 1, Literature, and Biology. Beginning with the class of 2020, students must demonstrate proficiency on all Keystone Exams as a graduation requirement. Remediation classes will be mandatory for non-proficient students.

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.

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 will 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

Students will have a two week period after the start of each new course, whether it is a full year, semester, or quarter long course to request a course change. Course change requests must be approved by the teacher, parent, and counselor.

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. Introduction to a variety of drawing and painting media, compositional techniques, color theory, critiques, and reflections upon the work provide skills needed to move from a realistic image to personal expression and significant meaning. Through study of the urban landscape, still lifes, and personally meaningful subject matter, students develop a strong foundation of observational skills and a portfolio of artworks for college reviews. The focus is on the individual development of each student’s personal style. Artwork displayed in local venues is used as a resource for study. Field trips and visiting artists provide connection to the real world of art. Students also exhibit their work and collaborate with their colleagues in other art areas.

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 offers students an intensive workshop environment in various forms of writing and communication, including prose (creative nonfiction, fiction, personal essay and opinion, writing for news media), and writing for stage and screen. Students participate in the creation and publication of a literary magazine, develop screenplays and stage scripts, and collaborate with students in other art disciplines. Writing students will also be encouraged to work in mentoring positions with local media outlets.

English

World Literature I – Honors / College Prep

Grade 9 1.0 Credit 1 Year Weight 1.0

Prerequisite: 90% or better in 8th 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 9th grade English to qualify for Honors. Summer work is required for World Literature II 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 10th 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 11th 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 (2018-2019 taught live)

Grade 11,12 1.0 Credit 1 Year Weight 1.05

Prerequisite: 93% or higher in previous English course and teacher recommendation.

This course will strengthen the effectiveness of student writing through close reading and frequent practice at applying rhetorical strategies, analyzing information from source texts, and writing arguments. Students will become critical readers of predominantly nonfiction works, including expository, argumentative, analytical, and personal texts from various authors and time periods.

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.

Beginner Algebra

Grade 9 1.0 Credit 1 Year Weight 1.0

Prerequisite: N/A

This course is designed to prepare students with the background for success in Algebra. The content standards for this course have been established for the State of Pennsylvania and are designed for students to be able to communicate number sense concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines. The units that will be covered this year are as follows:

Unit1: Real Numbers

Unit 2: Proportional Reasoning

Unit 3: Data Analysis

Unit 4: Algebra

Unit 5: Spatial Geometry

Unit 6: Perimeter, Area, Surface Area and Volume

Algebra I - Honors / College Prep

Grade 9-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: 85% or higher in previous math course and/or teacher recommendation for Honors.

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 may be worth 2.0 credits when combined with ALEKS. Placement testing may be required for mathematics for incoming freshmen.**

Intermediate Algebra

Grade 9-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: Completion of Algebra 1 and teacher recommendation

This course takes students on a journey through more advanced algebra concepts and applications. This course focuses on the last 6 Chapters of Algebra 1 which are polynomials, factoring, quadratic equations, probability & statistics, 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.

Keystone Exam – Algebra I Remediation

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: This course is designed as remediation for students who did not pass the Keystone Exam.

This course helps students prepare for the State of Pennsylvania's Keystone Exam in Algebra I. The content of this course is focused on the assessment anchors for the Algebra I Mathematics exam as outlined by the Keystone Exam Program. The course integrates assignments and problem solving exercises throughout the lessons that reinforce the key concepts and help students prepare for the end of course exam. The major Keystone Exam assessment anchors that are covered by this course include:

- Operations with Real Numbers and Expressions
- Linear Equations
- Linear Inequalities

- Functions
- Coordinate Geometry
- Data Analysis

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 – Honors / College Prep (CAOLA)

Grade 11-12 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.

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.

Pre-Calculus

Grade 9-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: Algebra II and Geometry; teacher recommendation

Pre-Calculus helps students gain the knowledge they need for success in calculus and other high school math courses. The course focuses on linear, rational, polynomial, exponential, and logarithmic functions; systems of equations; systems of inequalities; matrices; trigonometry; series; sequence; probability; 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: Pre-Calculus; teacher recommendation / Completion of summer work required

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. Pre-calculus 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 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: Pre-calculus; 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.

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.

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.

Science

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.

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 (CAOLA)

Grade 10-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: Algebra I; 85% or higher in previous science course 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.

Keystone Exam – Biology

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 of 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

Physical Science (CAOLA)

Grade 10-12 1 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

Honors Environmental Science

Grade 11,12 .5 Credit 1 Semester Weight 1.0

Prerequisite: 90% or above in Biology, Science teacher recommendation, & successful completion Algebra I

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. This honors course covers each topic in more depth, contains advanced laboratory activities/projects, and is completed at a faster pace with a homework component.

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.

Anatomy and Physiology (CAOLA)

Grade 10-12 1 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.

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 Credit 1.0 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 Credit 1.0 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 (CAOLA)

Grade 11 Credit 1.0 1 Year Weight 1.0

Prerequisite: 85% or higher in previous Social Studies course and/or teacher recommendation for Honors.

This course takes students on a journey through the key events that have shaped America as a nation, from the end of the Civil War in 1865 to the height of the Cold War in 1980. The journey begins with the Reconstruction, a period of great transition and opportunity to heal a broken nation. Students witness the great migration westward and explore how the Industrial Revolution and waves of immigration fueled the flames of the American spirit today. The course details the challenges America faced and how equality was elusive for populations of American Indians, African Americans, immigrants, and women. Students learn how the core values of the founding fathers eventually prevailed and led to the Women's Suffrage and Civil Rights Movements. The course closely examines the impact of war, with units covering the role of the United States in World War I, World War II, the Korean War, and the Vietnam War. Throughout their journey, students encounter the great political, industrial, military, and human rights leaders who shaped

America into a beacon of hope.

AP US History (2018-2019 taught live)

Grade 11,12 Credit 1.0 1 Year Weight 1.05

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

AP* U.S. History analyzes and explores the economic, political, and social changes in America since Columbus. Students master historical knowledge and critical analysis, build reading, writing, and communication skills, and discover how historical events have contributed to American culture. In the process, they'll learn how decisions and events of the past continue to have profound effects on the world today and how knowledge of the causes behind past events can influence future decisions. By the end of the course, students will be ready to put their factual knowledge to work by weighing evidence and interpreting problems presented by historians. 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.

AP US Government (CAOLA)

Grade 11,12 Credit 1.0 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 Credit .5 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.

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.

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

Prerequisite: N/A

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.

Psychology (CAOLA)

Grade 11,12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

In this course students learn how their senses, perceptions, emotions, and intelligence influence the way they think, feel, and learn. In this course, students learn about the field of psychology, including the concepts and tools used to assess intelligence, sensation and perception, memory, motivation and emotion, and learning. At the end of this course, students gain both knowledge of and appreciation for psychology and how it affects everyone.

Sociology (CAOLA)

Grade 11,12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

The field of sociology explores the development, dynamics, and structure of societies, and society's connections to human behavior. Sociology examines the ways in which groups, organizations, communities, social categories (such as class, sex, age, or race), and various social institutions (such as kinship, economic, political, or religious) affect human attitudes, actions, and opportunities. In this course, students learn about the concepts and tools used to understand individuality, social structure, inequality, family structure, education, economics, politics, and social change.

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.

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

Dance electives may count toward Physical Education requirements.
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 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 – Costuming for Theatre and Dance

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

This course will include basic sewing skills, pattern knowledge, and design for performance costumes. The students will also learn about color and fabric qualities that are important for successful costuming. They will participate in a short residency with a professional costumer. Projects will include interdisciplinary work and designing and creating performance costumes.

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 Elective – Children’s Theatre

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

In this class, students will approach the wide-ranging world of children's theatre, exploring storytelling approaches, story adaptation techniques for live performance creation works, myths and classic story adaptations for contemporary children's audiences, and more. Part of the class will focus on learning more about the professional options that exist within the world of children's theatre. Motivated classes may choose to tackle the creation of finished productions of their original or adapted works for an audience.

Visual Art Elective – Introduction to Drawing, Painting, and Mixed Media

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

Students are introduced to drawing, painting, and mixed media techniques with a variety of media and surfaces, and composition skills.

Visual Art Elective - Yearbook

Grade 11-12 .5 Credit Semester 2 Weight 1.0

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

Students in this class will work independently and collaboratively to create our CASA Charter School Yearbook. A few students are needed from each discipline. Students will be needed to write, edit, artistically create visual images, photograph classes, groups, and activities, promote and help with fundraisers, and do any other duties for our yearbook as needed. Ideally, this class would have two representatives from each art discipline.

Creative Writing Elective – World Building

Grade 9-12 .5 Credit Semester 1 Weight 1.0

Prerequisite: N/A

This course is designed to introduce students to the world around them and, through that, give them a better understanding as to how to use that world OR create their own in the name of art. Students will read literature, but the emphasis of the course is on how the writer creates the world in which the story takes place.

Creative Writing Elective – Debate

Grade 9-12 .5 Credit Semester 2 Weight 1.0

Prerequisite: N/A

Students will learn what a debate is, how to conduct supportive research, how to set up compelling arguments, and how to engage in a full-on live debate.

Additional CAOLA Electives

Career Explorations (CAOLA)

Grade 9-12 .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.

Introduction to Office Applications (CAOLA)

Grade 10-12 1 Credit 1 Year Weight 1.0

Prerequisite: N/A

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.

Introduction to Open Office Applications (CAOLA)

Grade 11-12 1 Credit 1 Year Weight 1.0

Prerequisite: N/A

Introduction to OpenOffice Applications teaches students about the OpenOffice environment, and how to use the OpenOffice.org™ suite of applications for word processing, spreadsheets, databases, and presentations. The course covers OpenOffice Writer, Calc, Base, and Impress. As students learn the basics of OpenOffice Writer, they create, save, and format documents, learn how to produce customized documents, and how to include hyperlinks, graphics, and charts. Working with Calc, students create spreadsheets to manage, manipulate, and calculate data, and learn how to create formulas and filters to find the data applicable to a particular question or situation. With Base, students learn how to create professional-looking databases to manage data from many related spreadsheets. Learning to customize these databases prevents errors in data entry and shows relationships between different spreadsheets. Students then present their findings in multimedia presentations created with Impress. At the completion of this course, students have the tools to work with and present information in a variety of forms for professional, academic, and personal use.

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.

Advanced Music Theory (CAOLA)

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: 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.

Music Appreciation: The Enjoyment of Listening

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Music is part of everyday lives and reflects the spirit of our human condition. To know and understand music, we distinguish and identify cultures on local and global levels. This course will provide students with an aesthetic and historical perspective of music, covering a variety of styles and developments from the Middle Ages through the 21st Century. Students will acquire basic knowledge and listening skills, making future music experiences more informed and satisfying.

Music Theory and Appreciation

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: 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.

Chemical Engineering (CAOLA)

Grade 11,12 .25 Credit 1 Quarter Weight 1.0

Prerequisite: N/A

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

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

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

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.

Careers in Criminal Justice: Criminal Justice Operations (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

The criminal justice system offers a wide range of career opportunities. In this course, students will explore different areas of the criminal justice system, including the trial process, the juvenile justice

system, and the correctional system.

Cosmetology: Cutting Edge Styles (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Students will explore career options in the field of cosmetology. Research into some of the common techniques used in caring for hair, nails, and skin in salons, spas, and other cosmetology-related business will also be presented.

Anthropology 1: Uncovering Human Mysteries (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

The aim of anthropology is to use a broad approach to gain an understanding of our past, present and future, and in addition address the problems humans face in biological, social and cultural life. This course will explore the evolution, similarity and diversity of humankind through time. It will look at how we have evolved from a biologically and culturally weak species to one that has the ability to cause catastrophic change. Exciting online video journeys to different areas of the anthropological world are just one of the powerful learning tools utilized in this course.

Anthropology 2: More Human Mysteries Uncovered (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Anthropology 1

Anthropology has helped us better understand cultures around the world and through different time periods. This course continues the study of global cultures and the ways that humans have made sense of their world. We will examine some of the ways that cultures have understood and gave meaning to different stages of life and death. The course will also examine the creation of art within cultures and examine how cultures evolve and change over time. Finally, we will apply the concepts and insights learned from the study of anthropology to several cultures found in the world today.

Archaeology: Detectives of the Past (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

George Santayana once said, "Those who cannot remember the past are condemned to repeat it." The field of archaeology helps us to better understand the events and societies of the past and

have helped to shape our modern world. This course focuses on the techniques, methods, and theories that guide the study of the past. Students will learn how archaeological research is conducted and interpreted, as well as how artifacts are located and preserved. Finally, students will learn about the relationship of material items to culture and what we can learn about past societies from these items.

Art History and Appreciation (CAOLA)

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: NA

Where do artists find their inspiration? How can you tell a Rembrandt from a Renoir? Art History and Appreciation surveys artwork and architecture from different periods in human history. Students learn how artists use their abilities to observe and interpret reality and create unique artistic styles and works. Part 1 focuses on the art and architecture in Europe, Africa, and the Americas, while Part 2 moves east to Asia and Oceania. In each part of the course, students note the development of different art movements, the variation in artistic techniques, and the influence of significant artists and designers. Lessons explain the tools, skills, and techniques artists use to create their works. Students also learn how to differentiate between art movements in significant periods of history. At the end of this course, students can recognize different artistic styles, movements, and techniques, and identify specific pieces of artwork by period and origin.

Art in World Cultures (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Who is the greatest artist of all time? Is it Leonardo DaVinci? Claude Monet? Michelangelo? Pablo Picasso? Is the greatest artist of all time someone whose name has been lost to history? You will learn about some of the greatest artists while also creating art of your own, including digital art. We will explore the basic principles and elements of art, learn how to critique art, and examine some of the traditional art of the Americas, Africa, and Oceania in addition to the development of Western art.

Creative Writing (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

For many hundreds of years, literature has been one of the most important human art forms. It allows us to give voice to our emotions, create imaginary worlds, express ideas, and escape the confines of material reality. Through creative writing, we can come to understand ourselves and our world a little bit better. This course provides students with a solid grounding in the writing process, from finding inspiration to building a basic story to using complicated literary techniques and creating strange hybrid forms of poetic prose and prose poetry. By the end of this course, students will learn how to discover their creative thoughts and turn those ideas into fully realized pieces of creative writing.

Criminology: Inside the Criminal Mind (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

In today's world, crime and deviant behavior rank at or near the top of many people's concerns. In this course, we will study the field of Criminology – the study of crime. We will look at possible explanations for crime from the standpoint of psychological, biological and sociological perspectives, explore the categories and social consequences of crime, and investigate how the criminal justice system handles not only criminals, but also their misdeeds. Why do some individuals commit crimes why others do not? What aspects in our culture and society promote crime and deviance? Why are different punishments given for the same crime? What factors...from arrest to punishment...help shape the criminal case process?

Digital Photography 1: Creating Images with Impact! (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Have you ever wondered how photographers take such great pictures? Have you tried to take photographs and wondered why they didn't seem to capture that moment that you saw with your eyes? The Digital Photography 1 course focuses on the basics of photography, including building an understanding of aperture, shutter speed, lighting, and composition. Students will be introduced to the history of photography and basic camera functions. Students will use the basic techniques of composition and camera functions to build a portfolio of images, capturing people, landscapes, close-up, and action photographs.

Digital Photography II: Discovering Your Creative Potential (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Digital Photography 1

In today's world, photographs are all around us, including in advertisements, on websites, and hung on our walls as art. Many of the images that we see have been created by professional photographers. In this course, we will examine various aspects of professional photography, including the ethics of the profession, and examine some of the areas that professional photographers may choose to specialize in, such as wedding photography and product photography. We will also learn more about some of the most respected professional photographers in history and we will learn how to critique photographs in order to better understand what creates an eye catching photograph.

Early Childhood Education 1 (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Want to have an impact on the most important years of human development? Students will learn how to create fun and educational environments for children, how to keep the environment safe for children, and how to encourage the health and wellbeing of infants, toddlers, and school-aged children.

Entrepreneurship 1: Starting Your Business (CAOLA)

Grade 9-12 1.0 Credit 1 Year Weight 1.0

Prerequisite: N/A

Do you dream of owning your own business? This course can give you a head start in learning about what you'll need to own and operate a successful business. Students will explore creating a business plan, financing a business, and pricing products and services.

Fashion and Interior Design (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A (Sewing machine at home required)

Do you have a flair for fashion? Are you constantly redecorating your room? If so, the design industry might just be for you! In this course, you'll explore what it is like to work in an industry by exploring career possibilities and the background that you need to pursue them. Get ready to try your hand at designing as you learn the basics of color and design then test your skills through hands-on projects. In addition, you'll develop the essential communication skills that build success in any business. By the end of the course, you'll be well on your way to developing the portfolio you need to get your stylishly clad foot in the door of this exciting field.

Forensic Science I: Secrets of the Dead

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Fingerprints. Blood spatter. DNA analysis. The world of law enforcement is increasingly making use of techniques and knowledge from the sciences to better understand the crimes that are committed and to catch the individuals responsible for those crimes. Forensic science applies scientific knowledge to the criminal justice system. This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

Forensic Science II: More Secrets of the Dead

Grade 10-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Forensic Science I

Although the crime scene represents the first step in solving crimes through forensic science, the crime laboratory plays a critical role in the analysis of evidence. This course focuses on the analysis of evidence and testing that takes place within this setting. We will examine some of the basic scientific principles and knowledge that guides forensic laboratory processes, such as those testing DNA, toxicology, and material analysis. Techniques such as microscopy, chromatography, odontology, entomology, mineralogy, and spectroscopy will be examined.

Gothic Literature: Monster Stories (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

From vampires to ghosts, these frightening stories have influenced fiction writers since the 18th century. This course will focus on the major themes found in Gothic literature and demonstrate how the core writing drivers produce, for the reader, a thrilling psychological environment. Terror versus horror, the influence of the supernatural, and descriptions of the difference between good and evil are just a few of the themes presented. By the time students have completed this course, they will have gained an understanding of and an appreciation for the complex nature of dark fiction.

Great Minds in Science: Ideas for a New Generation (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Is there life on other planets? What extremes can the human body endure? Can we solve the problem of global warming? Today, scientists, explorers, and writers are working to answer all of these questions. Like Edison, Einstein, Curie, and Newton, the scientists of today are asking questions and working on problems that may revolutionize our lives and world. This course focuses on 10 of today's greatest scientific minds. Each unit takes an in-depth look at one of these individuals, and shows how their ideas may help to shape tomorrow's world.

Health Science 1: The Whole Individual (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Will we ever find a cure for cancer? What treatments are best for conditions like diabetes and asthma? How are illnesses like meningitis, tuberculosis, and the measles identified and diagnosed? Health sciences provide the answers to questions such as these. In this course,

students will be introduced to the various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. They will explore the importance of diagnostics and research in the identification and treatment of diseases. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.

Health Science II: Patient Care and Medical Services (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Health Science 1

Health Science II is designed to further the student's understanding of the health care workplace, including patient and caregiver instructions and how various members of the health care team work together to create an ethical, functional, and compassionate environment for patients.

History of the Holocaust (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Holocaust education requires a comprehensive study of not only times, dates, and places, but also the motivation and ideology that allowed these events. In this course, students will study the history of anti-Semitism; the rise of the Nazi party; and the Holocaust, from its beginnings through liberation and the aftermath of the tragedy. The study of the Holocaust is a multi-disciplinary one, integrating world history, geography, American history, and civics. Through this in-depth, semester-long study of the Holocaust, high school students will gain an understanding of the ramifications of prejudice and indifference, the potential for government-supported terror, and they will get a glimpse of kindness and humanity in the worst of times.

Hospitality & Tourism: Traveling the Globe (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

With greater disposable income and more opportunities for business travel, people are traversing the globe in growing numbers. As a result, hospitality and tourism is one of the fastest growing industries in the world. This course will introduce students to the hospitality and tourism industry, including hotel and restaurant management, cruise ships, spas, resorts, theme parks, and other areas. Students will learn about key hospitality issues, the development and management of tourist locations, event planning, marketing, and environmental issues related to leisure and travel. The course also examines some current and future trends in the field.

Human Geography: Our Global Identity (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

How do language, religion, and landscape affect the physical environment? How do geography, weather and location affect customs and lifestyle? Students will explore the diverse ways in which people affect the world around them and how they are affected by their surroundings. Students will discover how ideas spread and cultures form, and learn how beliefs and architecture are part of a larger culture complex. In addition to introducing students to the field of Human Geography, this course will teach students how to analyze humans and their environments.

International Business: Global Commerce in the 21st Century (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

From geography to culture Global Business is an exciting topic in the business community today. This course is designed to help students develop the appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace. It takes a global view on business, investigating why and how companies go international and are more interconnected. The course further provides students a conceptual tool by which to understand how economic, social, cultural, political and legal factors influence both domestic and cross-border business. Business structures, global entrepreneurship, business management, marketing, and the challenges of managing international organizations will all be explored in this course. Students will cultivate a mindfulness of how history, geography, language, cultural studies, research skills, and continuing education are important in both business activities and the 21st century.

Introduction to Social Media (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Have a Facebook account? What about Twitter? Whether you've already dipped your toes in the waters of social media or are still standing on the shore wondering what to make of it all, learning how to interact on various social media platforms is crucial in order to survive and thrive in this age of digital communication. In this course, you'll learn the ins and outs of social media platforms such as Facebook, Twitter, Pinterest, Google+, and more. You'll also discover other types of social media you may not have been aware of and how to use them for your benefit – personally, academically, and eventually professionally as well. If you thought social media platforms were just a place to keep track of friends and share personal photos, this course will show you how to use these resources in much more powerful ways and publishing a website. At the end of this course, students have knowledge of and appreciation for HTML and its use for web design and programming.

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

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

This course, although looking specifically at the experiences of women, is not for girls only. If you are a student interested in exploring the world through film and open minded enough to be interested in social change, this course is for you.

Law & Order: Introduction to Legal Studies (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Every society has laws that its citizens must follow. From traffic laws to regulations on how the government operates, laws help provide society with order and structure. Our lives are guided and regulated by our society's legal expectations. Consumer laws help protect us from faulty goods; criminal laws help to protect society from individuals who harm others; and family law handles the arrangements and issues that arise in areas like divorce and child custody. This course focuses on the creation and application of laws in various areas of society. By understanding the workings of our court system, as well as how laws are actually carried out, we become more informed and responsible citizens in our communities and of our nation.

Mythology & Folklore: Legendary Tales (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Mighty heroes. Angry gods and goddesses. Cunning animals. Since the first people gathered around fires, mythology and folklore has been used in a way to make sense of humankind and our world. Beginning with an overview of mythology and different kinds of folklore, students will journey with ancient heroes as they slay dragons and outwit gods, follow fearless warrior women into battle, and watch as clever monsters outwit those stronger than themselves. They will explore the universality and social significance of myths and folklore, and see how these are still used to shape society today.

Peer Counseling (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Helping people achieve their goals is one of the most rewarding of human experiences. Peer counselors help individuals reach their goals by offering them support, encouragement, and resource information. This course explains the role of a peer counselor, teaches the observation, listening, and emphatic communication skills that counselors need, and provides basic training in conflict resolution, and group leadership. Not only will this course prepare you for working as a

peer counselor, but the skills taught will enhance your ability to communicate effectively in your personal and work relationships.

Philosophy: The Big Picture (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

This course will take you on an exciting adventure that covers more than 2,500 years of history! Along the way, you'll run into some very strange characters. For example, you'll read about a man who hung out on street corners, barefoot and dirty, pestering everyone he met with questions. You'll learn about another eccentric 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 most brilliant and influential thinkers of all time. As you learn about these great thinkers, you'll come to see how and where many of the most fundamental ideas of Western Civilization originated. You'll also get a chance to ask yourself some of the same questions these great thinkers pondered. 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.

Social Problems I: A World in Crisis (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Students will become aware of the challenges faced by social groups, as well as learn about the complex relationship among societies, governments and the individual. Each unit is focused on a particular area of concern, often within a global context. Possible solutions at both the structural level as well as that of the individual will be examined. Students will not only learn more about how social problems affect them personally, but begin to develop the skills necessary to help make a difference in their own lives and communities, not to mention globally.

Social Problems II: Crisis, Conflicts & Challenges (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: Social Problems I

The Social Problems II course continues to examine timely social issues affecting individuals and societies around the globe. Students learn about the overall structure of the social problem as well as how it impacts their lives. Each unit focuses on a particular social problem, including racial discrimination, drug abuse, the loss of community, and urban sprawl, and discusses possible solutions at both individual and structures levels. For each issue, students examine the connections in the global arena involving societies, governments and the individual.

Sports and Entertainment Marketing (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Have you ever wished to play sports professionally? Have you dreamed of one day becoming an agent for a celebrity entertainer? If you answered yes to either question, then believe it or not, you've been fantasizing about entering the exciting world of sports and entertainment marketing. Although this particular form of marketing bears some resemblance to traditional marketing, there are many differences as well – including a lot more glitz and glamour! In this course, you'll have the opportunity to explore basic marketing principles and delve deeper into the multi-billion dollar sports and entertainment marketing industry. You'll learn about how professional athletes, sports teams, and well known entertainers are marketed as commodities and how some of them become billionaires as a result. If you've ever wondered about how things work behind the scenes of a major sporting event such as the Super Bowl or even entertained the idea of playing a role in such an event, then this course will introduce you to the fundamentals of such a career.

Theater, Cinema & Film Production (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Lights! Camera! Action! This course will introduce students to the basics of film and theater productions. Students will learn about the basics of lighting, sound, wardrobe, and camerawork for both film and theater settings. The course also explores the history of film and theater and the influence they have had on society. Students will analyze and critique three influential American films, Casablanca, Singin' in the Rain, and The Wizard of Oz.

The Lord of the Rings: An Exploration of the Films & Their Literary Influences (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

The Lord of the Rings is one of the most popular stories in the modern world. In this course, you will study the movie versions of J.R.R. Tolkien's novel and learn about the process of converting literature to film. You will explore fantasy literature as a genre and critique the three Lord of the Rings films.

Veterinary Science: The Care of Animals (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

As animals play an increasingly important role in our lives, scientists have sought to learn more about their health and well-being. Taking a look at the pets that live in our homes, on our farms, and in zoos and wildlife sanctuaries, this course will examine some of the common diseases and

treatments for domestic animals. Toxins, parasites, and infectious diseases impact not only the animals around us, but at times...we humans as well! Through veterinary medicine and science, the prevention and treatment of diseases and health issues is studied and applied.

World Religions: Exploring Diversity (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Throughout the ages, religions from around the world have shaped the political, social, and cultural aspects of societies. This course focuses on the major religions that have played a role in human history, including Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Shintoism, and Taoism. Students will trace the major developments in these religions and explore their relationships with social institutions and culture. The course will also discuss some of the similarities and differences among the major religions and examine the connections and influences they have.

Introduction to Manufacturing: Product Design and Innovation (CAOLA)

Grade 9-12 .5 Credit 1 Semester Weight 1.0

Prerequisite: N/A

Think about the last time you visited your favorite store. Have you ever wondered how the products you buy make it to the store shelves? Whether it is video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In this course, you'll learn about the types of manufacturing systems and processes used to create the products we buy every day. You'll also be introduced to the various career opportunities in the manufacturing industry including those for engineers, technicians, and supervisors. As a culminating project, you'll plan your own manufacturing process for a new product or invention. If you thought manufacturing was little more than mundane assembly lines, this course will show you just how exciting and fruitful the industry can be.



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