Serving students in kindergarten through 12th grade, the Pennsylvania Cyber Charter School (PA Cyber) is one of the largest, most experienced, and most successful online public schools in the nation. PA Cyber’s online learning environments, personalized instructional methods, and choices of curricula connect Pennsylvania students and their families with state-certified and highly-qualified teachers, and rich academic content that is aligned to state standards. Founded in 2000, PA Cyber is headquartered in Midland (Beaver County) and maintains a network of support offices throughout the state. As a public school, PA Cyber is open for enrollment by any school-age child residing in the Commonwealth of Pennsylvania, and does not charge tuition to students or families.

Non-Discrimination Statement – Students: The Pennsylvania Cyber Charter School (“PA Cyber” or “the School”) does not discriminate against protected students as defined by applicable federal, Pennsylvania state or local laws, including but not limited to the Pennsylvania Human Relations Act, Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments Act of 1972, and Section 504 of the Rehabilitation Act of 1973. PA Cyber is an equal opportunity educational institution and does not discriminate unlawfully in its educational programs, policies, activities or admissions practices on the basis of sex, race, color, national origin, religion, age, disability, genetic information or any other classification protected by applicable federal, state or local laws.
# Table of Contents

## School Information
- Accreditations – Middle States Accreditation; AdvancED; NCAA  
- Curriculum Providers – Lincoln Interactive; Calvert School  
- Pacing; Credit Recovery
- Instructional Delivery Modes – Virtual Classroom; Blended Classroom  
- Asynchronous Classroom  
- State Testing – PSSA Exams; Keystone Exams

## Student Support and Services
- PA Cyber Offices  
- Student Support  
- Student Services and Activities  
- Middle School Clubs  
- High School Clubs

## Grades K-2 Courses
- Calvert (Kindergarten, First, and Second Grade)  
- Little Lincoln Early Kindergarten  
- Little Lincoln Kindergarten  
- Little Lincoln First Grade  
- Little Lincoln Second Grade

## Grades 3-5 Courses
- Calvert (Third, Fourth, and Fifth Grade)  
- Lincoln Interactive Third Grade  
- Lincoln Interactive Fourth Grade  
- Lincoln Interactive Fifth Grade

## Grades 6-8 Courses
- Lincoln Interactive Sixth Grade  
- Lincoln Interactive Seventh Grade  
- Lincoln Interactive Eighth Grade

## Grades K-8 Additional Courses
- Physical Education and Health  
- Fine Arts  
- Lincoln Explorations  
- Lincoln Discoveries

## High School Courses
- PA Cyber Graduation Requirements  
- School of Engineering Graduation Requirements  
- English Language Arts
- Mathematics  
- Science  
- Social Studies  
- Fine Arts  
- World Language  
- Physical Education and Health  
- Business Electives  
- Multimedia & Technology Electives  
- General Electives  
- Keystone Courses
Accreditations

Middle States
In the fall of 2011, The Pennsylvania Cyber Charter School was granted prestigious accreditation through the Middle States Association of Colleges and Schools. As an accredited member of the Middle States Association (MSA), the Pennsylvania Cyber Charter School joins an educational network that includes the full spectrum of private and public educational institutions in the United States and major colleges and universities in more than 85 countries around the world.

Earning accreditation from MSA means PA Cyber meets Middles States’ 12 accepted standards for schools. These standards address the rigor of academic programs, the processing of academic records, business practices, and long term goals for continued improvement. In order to achieve accreditation, PA Cyber went through an extensive self-evaluation, supported by MSA’s professional staff.

Enrolling in a school that has received accreditation is important for a variety of reasons. It ensures that the school has met and will continue to meet strict professional standards to maintain accreditation. Middle States accredited institutions achieve a level of educational quality and effectiveness that meets and goes well beyond the accountability requirements of governing bodies, including state and federal inspection, reporting, and monitoring. Accreditation is especially important when considering high school graduation and college admissions.

AdvancED
The National Network of Digital Schools (NNDS), the exclusive provider of Lincoln Interactive online curriculum, has received corporate accreditation from AdvancED, a global, non-governmental, voluntary association of schools, learning centers, and corporations in 73 countries. Accreditation is awarded only after a rigorous self-study and onsite evaluation process, which demonstrates a willingness to be held accountable to the educational community and to educational professionals on high quality standards and accountability.

NNDS is honored to have received corporate accreditation for its secondary level courses. NNDS is committed to adhering to AdvancEd’s high standards, to seek continuous improvement, and to submit to ongoing external review to ensure NNDS retains this distinction. The AdvancED accreditation provides NNDS with an internationally recognized mark of quality for our organization and demonstrates our commitment to excellence.

NCAA
Our high school courses have been approved by the NCAA Eligibility Center. This organization establishes academic standards that student athletes must meet in order to compete in intercollegiate athletics.
Curriculum Providers

Lincoln Interactive
Lincoln Interactive provides students with an innovative and effective educational experience while utilizing state of the art technology, an interactive and engaging curriculum, and the guidance of highly qualified, licensed instructors.

Employing a unique and consistent design model, each asynchronous Lincoln Interactive course offers students a variety of content supplemented with various activities that include web investigations, podcasts, interactive labs, PowerPoint presentations, videos, songs, and games.

Aligned to state and national standards, lessons also contain differentiated instruction through the identification of key concepts, reinforcements, and enrichment activities. Varied and frequent assessments measure students' knowledge and provide students with valuable feedback.

Lincoln Interactive's catalog of courses includes Little Lincoln, Primary, and Secondary courses. Little Lincoln offerings include Early Kindergarten through Second Grade. The Primary offerings include Third Grade through Fifth Grade. Secondary offerings include middle and high school core courses in Math, English, Science, and Social Studies, along with a variety of electives for various grade levels.

Lincoln Interactive, one of the nation's premier online curriculum providers, delivers student-friendly courses that offer a wide range of opportunities for academic mastery, investigation, and interaction.

Calvert School
Students in Kindergarten through fifth grade may participate in a curricular framework developed by Calvert Educational Services, a division of the Middle States Association of Colleges and School, and the Commission on the International and Transregional Accreditation (CITA). Cavert's comprehensive curriculum uses a blend of traditional textbooks and online learning. The K-5 curriculum is built on a foundation of reading, writing, and arithmetic. This foundation is layered with history, science, music, geography, and the arts to ensure a well-rounded education.

Students are assigned a Pennsylvania certified teacher and their progress is monitored by both the teacher and the student's Academic Advisor. The teacher grades and evaluates the assessments and provides the family with a holistic, narrative description of the strengths and weaknesses of the student, and suggests additional practice, reinforcement, and activities.

Calvert’s teacher-created Lesson Manuals, relevant online resources, and proven educational methodologies combine to create a complete and organized curriculum to guide your student to success.

Pacing
The Pennsylvania Cyber Charter School has a course pacing policy in place that will help our students reach their educational goals. In addition to providing accountability, pacing ensures that our students are attaining various Pennsylvania educational standards. PA Cyber is dedicated to providing an innovative, individualized education to our students, and we will continue to offer the highest level of service, support, and flexibility.

Pacing requirements for our various curriculum offerings:

- Students will be given 10 months (300 days including weekends) to complete a full-year course or 1.0 credit course.
- Students will be given 5 months (150 days including weekends) to complete a .5 credit course (excluding Credit Recovery courses).
- Students will be given 2½ months (75 days including weekends) to complete a .25 credit course.
- Students will be given 1½ months (45 days including weekends) to complete a .5 credit Credit Recovery course.

All GIEP, IEP, and 504 Plans will be honored.

Credit Recovery
To help high school students meet Pennsylvania's graduation requirements, The Pennsylvania Cyber Charter School has implemented Credit Recovery for qualifying students. Our Credit Recovery courses utilize the Lincoln Interactive curriculum to provide students engaging content with supplemental activities including podcasts, videos, games, and interactive labs. The curriculum uses a consistent design model that incorporates differentiated instruction. Reinforcement and enrichment activities, along with practice assignments and problems are included throughout each course to help ensure students grasp the concepts needed to succeed.

Please contact your Academic Advisor for a complete list of available Credit Recovery courses, and to see if you qualify for this service.
Instructional Delivery Modes

Virtual Classroom (VC)

The Pennsylvania Cyber Charter School offers students a unique instructional setting by conducting real-time classes with Pennsylvania certified teachers through our Virtual Classroom (VC). The Virtual Classroom is powered by our new Learning Management system, BrainHoney, and our synchronous delivery system, Blackboard Collaborate.

Virtual classes are available to students in grade 2-12. Virtual Classroom courses are based on the Lincoln Interactive curriculum, and students earn credit when they successfully complete the year-long course. The Virtual Classroom follows a traditional school year calendar, typically beginning in September and ending in June.

Virtual Classroom students have the opportunity to interact with their teachers and classmates each day. All core subject area courses meet five days per week, while elective courses meet on Monday, Wednesday, and Friday or Tuesday and Thursday. The scheduling of VC courses is flexible; however, students are required to attend. Together with your Academic Advisor, families can choose from a variety of times for each class in order to meet each student’s need.

Students in grades 2-4 will be scheduled with the same teacher for all core subjects and would meet in class each day for a given time period. Students in grades 5-12 will have one teacher for each course. Daily lessons include discussions, video, and other activities.

Homework will be assigned daily to reinforce the concepts presented in class. All Virtual Classroom courses are recorded and archived so students can review sessions as needed.

The Virtual Classroom offers students variety, innovative technology, teacher support and guidance, and the opportunity to succeed.

Blended Classroom (BC)

The Pennsylvania Cyber Charter School is excited to introduce the newest instructional method to our students. The Blended Classroom (BC) combines the best of the asynchronous, self-paced setting with the addition of a live classroom experience one day per week. Blended Classroom courses are taught by Pennsylvania certified teachers. Attendance in the live component will be based on student need. The Blended Classroom is powered by our new Learning Management system, BrainHoney, and our synchronous delivery system, Blackboard Collaborate.

The Blended Classroom is an option for students in grades K-12. In grades K-4, students selecting either the Calvert or Lincoln Interactive curriculum will be scheduled in a live class session once a week for all subjects. These class sessions will contain video clips, discussion, and other activities to help reinforce the content presented in the asynchronous material. In grades 5-12, all core content area courses, including Language Arts, Math, Science, and Social Studies will be offered in the Blended Classroom. Students will be required to maintain a steady pace in their asynchronous work, and may be required to attend the once weekly live classroom meeting.

The Blended Classroom offers the flexibility of a self-paced course with the live teacher support that will help all students be successful.
Asynchronous Classroom (AC)
The Asynchronous Classroom (AC) is available for our elective and enrichment courses. Asynchronous classes can be completed at any time and do not require a live component, providing students with the flexibility to complete schoolwork when it is convenient for them.

In this setting, students log in to the BrainHoney Learning Management System, and complete the work as posted in the course. Course components include readings, videos, games, discussion board threads, and a variety of assessments. A Pennsylvania certified teacher is available to assist students and to provide feedback as they work in the class.

State Testing

PSSA Exams
The Pennsylvania System of School Assessment, or PSSA, is a measure of student proficiency in reading, writing, mathematics, and science according to the Pennsylvania Core Standards. PSSA results allow PA Cyber teachers and administrators to assess student learning and achievement each year, and provide a snapshot of the each student’s abilities. Students in grades 3-8 are required to take the Math and English Language Arts PSSA exam. In grades 4 and 8, students will also be required to take the Science PSSA exam. Tests are given in the spring, and Academic Advisors will make arrangements with each family to coordinate testing days, times, and locations.

Keystone Exams
The Keystone Exams are end-of-course assessments designed to assess student proficiency in Algebra I, Biology, and English Literature. These exams are a component of Pennsylvania’s system of high school graduation requirements. PA Cyber will provide two testing windows for students. The first testing window will take place in December, and the second testing window will take place in May. As students complete courses associated with Keystone Exams, Academic Advisors will make testing arrangements and notify the student of the date, time, and location of each Keystone Exam.

Beginning with the 2013-2014 cohort, students not scoring proficient or higher on a specific Keystone Exam, will be enrolled in a Keystone I course that is designed to help students understand, practice, and master the concepts tested. After completing the required course, the student will be scheduled to retest during the next available testing window. If the student fails to score proficient or higher on their second attempt, he or she will be enrolled in a Keystone II course. The Keystone II course emphasizes test taking skills, provides a review of the content, and offers interaction with a live instructor. After completion of the Keystone II course, a project-based assessment will be administered as a final attempt to achieve proficiency.

Specific details about the Keystone Exams and testing requirements will be shared with parents and students through the year from PA Cyber Administrators and Academic Advisors.
Student Support & Services

PA Cyber Offices

In addition to the home office in Midland, the Pennsylvania Cyber Charter School has established eight office locations across the state to enhance the relationships between our school and the families we serve. At each office, students can participate in a variety of activities including, ArtReach, GATE/STAR enrichment, academic support, Family Link activities, guidance workshops, orientations, as well as social enrichment opportunities.

PA Cyber offices also provide information and assistance to families during the enrollment process. Both before and after enrollment, parents and students can visit one of our office locations to view demonstrations of our instructional programs and ask questions of qualified staff members.

For a complete list of activities and services offered at your nearest PA Cyber office, please contact your Academic Advisor.

Allentown
974 Marcon Blvd, Suite 200
Allentown, PA 18109

East Liberty
216 North Highland Avenue
Pittsburgh, PA 15206

Erie
2212 West 15th Street
Erie, PA 15405

Greensburg
351 Harvey Avenue
Greensburg, PA 15601

Harrisburg
479 Port View Drive, Building C-38
Harrisburg, PA 17111

Philadelphia
1553 Chester Pike, Suite 103
Crum Lynne, PA 19022

State College
2903 Benner Pike
Bellefonte, PA 16823

Wexford
155 Lake Drive
Wexford, PA 15090

North East PA Location Coming Soon!
Student Support

Guidance
The Guidance Department at the Pennsylvania Cyber Charter School believes individuals possess the power to control the quality, growth, and satisfaction in their lives. Our counselors fulfill a vital role in helping students meet their personal, social, educational, and career needs. Guidance counselors at PA Cyber offer a variety of support services to our students ranging from career and post-secondary preparation to personal, social, and emotional assistance; academic support; and staff assistant services. Counselors at PA Cyber also orchestrate the Pennsylvania standardized testing process and closely collaborate with school personnel, programs, and community resources to remove barriers to learning. While our delivery method is different than most in the helping profession, students’ needs continue to be assessed and evaluated so that we may provide the most student-based programs possible. It is our goal that all students will be empowered to create a quality life as they acquire knowledge and learn responsible behaviors.

Student Assistance Program
The Student Assistance Program (SAP) is designed to assist school personnel in identifying issues that could pose a barrier to a student’s success. Some of these issues include, but are not limited to, social and family problems, alcohol, tobacco, other drugs, and mental health concerns. The professionally trained SAP team members use school resources to remove barriers to learning. When the identified problem lies outside the scope of school resources, a team member may refer that student for a screening or an assessment for treatment in a location that serves their community.

Response to Instruction and Intervention
Response to Instruction and Intervention (RtII) is a three-tiered prevention strategy to enable early identification and support for students at academic or behavioral risk. RtII allows PA Cyber educators to identify and address difficulties prior to student failure. Careful monitoring, communication with parents and students, and the use of various programs can help students attain academic success.

Let’s Go Learn
Let’s Go Learn provides benchmark assessments in mathematics and reading that help provide information about each student’s strengths and weaknesses. Twice a year, students in grades 3-11 will take Let’s Go Learn assessments. Students in grades K-2 will take the assessment three times per year. For reading, all students will take the DORA (Diagnostic Online Reading Assessment). Students will be assessed across multiple areas, and will profile each student’s reading abilities.

For mathematics, students in grades K-7 will take the ADAM (Adaptive Diagnostic Assessment of Mathematics), and students in grades 8-10 with take the DOMA (Diagnostic Online Math Assessment). Students are assessed on multiple mathematical concepts, and each student’s mathematical abilities are identified.

Upon completion, parents will receive their student’s results. Scores are used to adjust instruction to each student’s needs.

Study Island
Study Island engages students in grades 3-12 in online interactive games in order to prepare for the PSSA and Keystone Exams. Ahead of state testing, students are expected to complete all topics in all subject areas for their grade level. The variety of activities, including games, flash cards, and videos, reinforce the Pennsylvania Assessment Anchors for success on the PSSA or Keystone Exam.
First in Math
First in Math engages students in grades K-8 with educational games to help develop basic grade level math skills by increasing their response time and accuracy. Students are motivated by earning incentive stickers upon completing each skill set. By building time in your child’s school day, First in Math will make an impact a child’s daily math work.

netTrekker
An educational search engine that brings the best of the web to K-12 students, netTrekker connects you to more than 400,000 hand-selected, educator-approved sites, including favorites such as BrainPOP and Weekly Reader. netTrekker search results are organized by student’s readability level and are aligned to standards so you can feel confident that your student is accessing websites appropriate for their grade level. netTrekker resources are personalized to each learner’s interests and are ideal for every student’s learning needs with reliable results.

Fast ForWord
Fast ForWord’s reading software helps improve K-12 students’ reading achievement. Using this support lowers a student’s frustration which leads to higher self-esteem while reading. Fast ForWord recognizes how people learn new things and acquire new skills. This technology provides opportunities for critical reading tasks to be practiced at an appropriate frequency and intensity for each individual student. Skill levels continuously adapt to keep the student challenged, but not frustrated. Embedded rewards build as the student progresses, which maximizes the motivation to continue the program.

Reading Assistant
MySciLEARN’s™ Reading Assistant provides K-12 students with individualized reading coaching every time they use it. Its patented technology provides real-time corrective feedback via speech recognition, an auto-calculation of how many words they pronounce correct per minute, and frequent check for understanding questions. This helps students self-correct as they read and stay motivated and focused on reading for accuracy and meaning. Parents can review their student’s scores and session reports so that they can see their child’s results instantly. The reading library offers a variety of selections that will reach many interests and reading levels.

Title I Coaching
Title I coaches provide a bridge for K-12 students who experience gaps in their reading and math development. Students in the program will be assessed by the Title I team which includes certified specialists in the fields of reading and math. The coach and Title I team will develop an individualized
intervention plan that will meet the need of each student, while helping them to realize success. Student progress is measured by Let’s Go Learn assessments to ensure the effectiveness of the instruction they receive.

**IMPACT**

IMPACT is a peer tutoring program in which a high achieving 10th, 11th, or 12th grade student tutors 3rd, 4th, 5th, or 6th grade students. Each tutor works independently with a student in order to prepare him or her for the Math PSSA exam. Each tutoring session is supervised by an Academic Advisor or Virtual Classroom teacher. Teachers track the student’s progress throughout the program and report progress to parents. Peer tutoring not only increases test scores and academic performance, but also helps increase self-esteem and social interaction.

**PA Cyber Library**

The PA Cyber library is an online tool that offers assistance to parents and students of all grade levels. The library includes information relevant to our school, in addition to offering research and reading materials. Users can utilize a plethora of support information such as “how to” guides, videos, news articles, and homework help. Newly added this year is our very own digital library which offers downloadable eBooks. Both physical and digital copies of books are available for borrowing. The library also offers access to the educational databases offered in EBSCOhost. Take advantage of this wonderful compilation of media, guidance, and subject materials by visiting the library.

**PA Cyber Video Tutor**

The PA Cyber Video Tutor is available to all PA Cyber students who need help learning or reviewing a topic in math or reading. PA Cyber teachers have recorded short mini-lessons on a variety of math and reading topics through all grade levels. These videos can serve as a review before a test, to clarify a concept when confused, or as enrichment to a lesson. These videos can be accessed any time, any day.

**Book It! Reading Program**

PA Cyber students in grades K-6 can participate in the Pizza Hut™ Book-It! program, which runs from October through March. This program encourages students to read daily. Together with their parents, students will keep track of daily minutes read. Students are encouraged to read at least 20 minutes per day. When students meet their goal, he or she will earn a coupon that can be redeemed for a free personal pan pizza at Pizza Hut.
Student Services and Activities

Family Link
Who puts the social in cyber? Family Link does! This outreach program was created to enrich the cyber school experience of both students and parents. Family Link gives PA Cyber families the opportunity to CONNECT through educational and cultural field trips, organized activities, and parent planned informal get-togethers. Family Link has an online community located on Big Tent where parents can interact and SUPPORT each other with discussions on how they make a PA Cyber education work for their family. Members also have access to a secure, online directory of fellow members’ names, grade levels, and geographic areas. This tool paves the way for communication with those who may SHARE your grade level, zip code, or interests.

ArtReach
ArtReach is a joint project with the Lincoln Park Performing Arts Center located in Midland to provide fine arts choices and opportunities. ArtReach offers PA Cyber students high-impact programs in the arts, including online and in-person workshops, classes, seminars, performances, and other special presentations in music, theater, dance, creative writing, and visual arts. Studio art classes with qualified teachers in art centers located across the state gives students an opportunity to take hands-on visual art classes. Additional art classes are offered through ArtReach at PA Cyber offices across Pennsylvania.

STEM Outreach and Programs
Every day, more and more areas of our lives are changing because of STEM, and we must continue asking how and why the world works the way it does. PA Cyber’s outreach aims to connect students with Science, Technology, Engineering, and Math activities and experiences to encourage curiosity and exploration. Through the use of our online collaboration tools and offices across the Commonwealth, our students will have opportunities to participate in STEM themed enrichment activities. STEM outreach encompasses guest speakers, clubs, science fairs, workshops, and activities that help bring STEM to all PA Cyber students.

GATE/STAR
Following PDE’s Chapter 16 regulations, the PA Cyber GATE (Gifted and Talented) team identifies, evaluates, and provides qualified students with individualized educational programs for gifted students. The team works closely with PA Cyber families to maximize each student’s educational potential through the use of appropriate course and grade acceleration, delivery of optional online enrichment courses, and the provision of educational events and other supplemental programs.

The PA Cyber GATE program affords the following for our GATE students:

• Live online enrichment courses taught by educators from PA Cyber and the Lincoln Park Performing Arts Charter School.
• Engaging educational outings that connect families across the Commonwealth.
• Personalized approach to understand and best accommodate gifted students’ educational needs.
• Online community to connect gifted students and invite them to share their interests through discussions.

Exclusive to PA Cyber, the STAR program complements the GATE program, and gives “stellar” students opportunities for enrichment through educational outings, online enrichment courses, and other supplemental programs. STAR students must meet the necessary academic and attendance criteria.
National Honor Society

The National Honor Society (NHS) is a nationwide organization in the United States and consists of many chapters in high schools. The PA Cyber NHS Chapter is open to students in grades 11 and 12. Selection is based on four criteria: scholarship, leadership, service, and character. NHS requires service to the community, school, or other organizations. Projects help students meet the required monthly service hour total. The National Honor Society was founded in 1921 by the National Association of Secondary School Principals. The Alpha chapter of NHS was founded at Fifth Avenue High School by Principal Edward S. Rynearson in Pittsburgh, Pennsylvania. National Honor Society chapters are commonly active in community service activities both in the community and at the school. In addition, NHS chapters typically elect officers, who under the supervision of the chapter advisor, coordinate and manage the chapter as a student organization.

Middle School Clubs

Adventures in Reading

Adventures in Reading club members meet online twice a month to share a love of reading! Come on an adventure each month and discover a new book. Students will be given a chance to obtain the book of the month in advance. Once we begin reading, we will discuss the books, keep journals of our thoughts, and share our adventures through online activities. Please join us for Adventures in Reading!

Science Investigators

Question everything! Have you ever wondered about things such as “How did the moon form?” or “Why is the sky blue?” Science Investigators will guide you through the scientific process and how to use the process to investigate and “question everything”. Our club will be focused to the interests of the members as they will have an active role in leading the discussions and direction of the club.

High School Clubs

Art Club

The Art Club offers students an opportunity to further their knowledge of art, media, techniques, and history beyond what is accomplished in a student’s art class, while benefitting from group collaboration. Students will also have the opportunity to work on independent projects and explore careers in the field of art. Meetings are held twice a month, and membership is open to all students with an interest in art, regardless of ability level. Art Club members will also have the opportunity to become a member of the National Art Honor Society.

Book of the Month Club

Aside from reading specific books assigned for class, students will have the opportunity to nurture and cultivate a taste for joyful reading. In addition to having fun, student participants will subsequently strengthen their reading skills, generate new reading habits and be encouraged to visit online libraries as well as their local libraries. Students will further explore literature through discussion board threads and participation in live online classroom discussions with their advisors and peers.

DECA

The PA Cyber DECA chapter is designed to develop future leaders in the fields of marketing, management, and entrepreneurship. Activities will focus on developing leadership abilities, presentation skills, and career job skills. DECA members will be invited to participate in competitive events at district, state, and national conferences. During competitions students will have the chance to network with business professionals and other students who wish to pursue management or marketing careers. In addition, students will have opportunities to apply for scholarships to colleges across the nation.
**Equestrian Club**
The Equestrian Club is for the horse enthusiast who wants to share and grow their knowledge and understanding of horses with others. Students will have the opportunity to engage with their peers through regular online meetings, collaborate in discussion boards, and meet face to face on field trips.

**Exploring Science Club**
We love science, how about you? PA Cyber’s Exploring Science Club is an opportunity for students to explore science in areas outside of their curriculum. This club will explore a variety of topics such as epigenetics, forensics, recent developments in particle physics, bioinformatics, the science of geology and new drilling methods – no science topic is off limits. Regular online meetings and a club website will allow students to share their love of science through discussions and presentations. Activities will include labs, projects, and optional field trips. Students who love science and would like to explore more should join us in Exploring Science.

**French Club**
The purpose of the PA Cyber French Club is to encourage the study of the French language and culture around the world. The French Club is open to all students, with or without previous French exposure, as it will range from beginning to advanced, striving to meet all students’ needs. The club will expose students to the French world around them here in the US, France, and other Francophone countries. Regular online meetings will facilitate the sharing of love for the French language and culture both by students and knowledgeable faculty. Activities will include watching French videos, exploring French art and literature, project creation based on cultural themes, and conversational skills. Voluntary field trips will also be made available to students. Students will be encouraged to share their thoughts and opinions on all activities and will be required to be an active part of the club.

**German Club**
The PA Cyber German Club is open to any high school student interested in the German language or German speaking cultures. It is not necessary for students to be enrolled in a German course in order to join the German Club. The German Club meets twice a month online. Students will practice basic conversations, read stories, listen to and sing all types of music, play games, and chat with virtual guests from German-speaking countries. Students are encouraged to share anything German-related with the other club members including songs, videos, websites, recipes, art, and/or their own work (poems, short stories, photographs). Other club activities include field trips and service projects. Field trip destinations and service projects are chosen by club members. The PA Cyber German Club is a chapter of the National German Honor Society. Students are encouraged to visit a virtual meeting to see if the German Club is for them!

**History Club**
The mission of the History Club is to develop leadership potential in students by building the reading, research, communication, and other skills students need to achieve personal success and become good citizens. Club members should expect to participate in both synchronous and asynchronous discussion, field trips, competitions, and more. No area of history is off-limits as students will explore both major historical accounts and local histories. A History Club student must possess a genuine interest in history, a willingness to participate in all activities, an open mind, and a positive attitude.
Newspaper Club
Newspaper Club members are encouraged to stay current with PA Cyber news, events, and activities, while also providing the school with a look at the world around us. Club members will participate in bi-weekly meetings and are encouraged to work together as a group to provide current, up-to-date information to PA Cyber staff and families. Members will also participate in the brainstorming, writing, and publishing of their own articles and the development of a newspaper from every angle.

Photography Club
The PA Cyber Photography Club encourages students to develop their photography skills in an environment that is mutually supportive and interactive. Members get to know each other and share their talents and knowledge through regular online meetings with theme competitions, online and physical exhibitions, photo field trips, and opportunities to chat and share. From beginners to advanced amateurs, using everything from cell phone cameras to digital SLRs, students are encouraged to share and improve their technical skills and creative instincts in an atmosphere of goodwill and friendship.

Spanish Club
The PA Cyber Spanish Club welcomes any and all students with an interest in the Spanish language or Hispanic culture. It is not necessary for students to be enrolled in a Spanish course in order to join the Spanish Club. Club members will have the opportunity to learn about Spanish-speaking countries, culture, food, art, holidays, and more. Virtual and live field trips will be planned so club members can have the opportunity to meet each other and share their common interest.
Calvert

Calvert Kindergarten

Calvert’s full day Kindergarten program offers hands-on, interactive learning to help prepare your child for first grade. The curriculum helps your child refine his or her reading skills with its phonics-based approach and read-aloud books. The curriculum integrates its reading materials with science and social studies, allowing for an interdisciplinary education. Math introduces students to numbers, shapes, problem solving, and ordering numbers. Kindergarten content includes Reading, Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Art; and Technology.

Calvert First Grade

The joy of Calvert’s first grade curriculum is watching your child develop into an independent reader and writer. Through activities that develop a full range of phonemic awareness, phonics, comprehension, vocabulary, and fluency skills, you will help your child build on the skills learned in Kindergarten. Students build a strong foundation in math skills and concepts through the Singapore math method. They study two- and three-digits numbers, addition and subtraction with and without regrouping, skip counting, measurements, telling time, and graphs. The newly updated and streamlined lesson manuals, answer keys, and tests allow for more concise content that is easier to follow. The science program includes the study of living things, our Earth, weather, matter, motion, and energy. Social studies includes biographies of well-known explorers, political figures, inventors, and leaders in American life. First grade content includes Reading, Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Art; and Technology.

Calvert Second Grade

Calvert’s second grade curriculum fully immerses your child in the world of independent reading. Using phonics storybooks and reading anthologies, you can help your child reinforce word analysis techniques and develop comprehension skills. Your child also begins writing dictated words and sentences, learning the rules of punctuation, and expressing his or her own ideas in original compositions. Students build a strong foundation in math skills and concepts through the Singapore math method. The newly updated and streamlined lesson manuals, answer keys, and tests allow for more concise content that is easier to follow. Students perform complex addition and subtraction, and are introduced to multiplication.
and division. They work with numbers up to a thousand, manipulate and measure geometric figures, develop skills with money and measurement, and represent data. Science includes units on heat, light, forces, properties of rocks, and the human body. Social studies topics include old-world figures, geography, and maps. Second grade content includes Reading, Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Art; and Technology.

**Little Lincoln Early Kindergarten**

Little Lincoln Early Kindergarten serves to fully prepare young students for the rigors of Kindergarten. Students will be introduced to the routines of school, and will complete daily lessons in reading, writing, and math, as well as be exposed each week to social studies, science, and wellness.

Early Kindergarten combines online and offline activities each day. Online, students will watch video lessons from their teacher, Miss Palomine and her sidekick, Socrates the Squirrel. Additionally, online, they will play mini-games to help reinforce concepts and skills, and have access to songs that are tied to daily learning objectives.

**Mathematics EK**

In Mathematics EK, students will learn about the numbers 0-20, begin to compare and order numbers, identify and create patterns, recognize shapes and colors, understand the concepts of measurement, collect data and create graphs, and begin to communicate mathematical ideas through problem solving.

**Reading EK**

Reading EK introduces your student to the alphabet and the world of literature. Students will be able to identify the letters of the alphabet, read and write his own name, and begin to identify sight words. They will listen and respond to a variety of literature, including stories, poems, rhymes, and songs. Students will also begin to learn how to speak clearly and respond to questions.

**Science EK**

Science EK uses your student’s natural sense of wonder to investigate the world around them. Students will learn about scientists and the work that they do. They will learn how to ask questions to investigate answers and use senses to learn about the world. Topics explored include light and sound, natural resources, simple machines, living and nonliving things, and the Earth, environment, and weather.

**Social Studies EK**

In Social Studies, Early Kindergarten students learn how to be a good citizen. They will learn about sharing, cooperation, and getting along with others. Students will be introduced to maps and geography, and learn about community helpers. Additional topics of study include families, following rules, different cultures and traditions, basic American history and American symbols, transportation, and communication.

**Writing EK**

In Writing EK, students will use pictures, letters, and words to express thoughts and ideas. Students will learn how to write by learning how to properly hold a pencil, trace letters of the alphabet, and eventually write the letters of his own name. In addition, students will practice their listening and comprehension skills, draw pictures to communicate ideas, and tell about personal experiences.
Little Lincoln Kindergarten

Students enrolled in Little Lincoln Kindergarten will build a solid foundation in the subjects of math, reading, writing, social studies, science, and visual arts. Little Lincoln Kindergarten combines both online and offline components. Online each day, students watch four engaging teacher videos featuring teachers Mr. Reed Moore, Mrs. Triggle, and Dr. Algae, and play a variety of mini-games designed to reinforce daily learning objectives. Wellness is also incorporated into the curriculum through weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

To meet the needs of all students, there are many enrichment opportunities known as *Extend your thinking!* These are meant to challenge students who need it. In addition, there are opportunities called *Reteaching* for every subject. These activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in different ways.

**Mathematics K**

Mathematics K students will learn about the numbers 0-40, be able to count forward and backwards, and be introduced to the concept of skip counting. Basic addition and subtraction will be practiced. Students will understand the characteristics of shapes and patterns, concepts of time, use tools to measure, and gather data and represent it in a graph. Kindergarten Mathematics lays the foundation for future mathematical thinking.

**Reading K**

Reading K sets the stage for success in reading and language arts. Students will understand the basic concepts of print. There is an emphasis on phonics, including letters, letter sounds, and word families. Grammar basics such as capitalization, punctuation, and parts of a sentence are introduced. Through a variety of fiction and nonfiction literature, students will be able to identify characters, main idea, plot, and setting. By the end of Kindergarten, students will be able to read common sight words and basic sentences.

**Science K**

Science K will develop students' natural inquiry skills by providing hands-on activities and experiments. Students will understand what scientists do and learn the basic steps of the scientific method. The five senses are used to gather and learn information about the word around them. Topics that will be explored include animals, safety, simple machines, habitats and the environment, the Earth and weather, and force and motion.

**Social Studies K**

In Social Studies K, students will learn about being a good citizen. They will learn about feelings, self-control, cooperation, good sportsmanship, and respect. Geography, maps, globes, landforms, and bodies of water will be introduced. Students will develop a sense of cultural diversity by exploring the traditions and customs of other countries and cultures. Other themes explored through the year include families, historical figures throughout time, American symbols and patriotism, rules and authority, wants and needs, communication, technology, and transportation.

**Writing K**

Writing K includes both handwriting and different forms of writing. Students will begin the year by practicing handwriting strokes, transitioning into to writing all uppercase and lowercase letters of the alphabet. Students will begin to communicate ideas through various types of writing including letters, stories, poems, directions, and lists. The writing process will be utilized, allowing students to edit their own work. Grammar is reinforced by practicing correct capitalization and punctuation in sentences.
Little Lincoln First Grade

Little Lincoln First Grade students continue to build on the mathematics, reading, writing, social studies, science, and visual arts skills learned in Kindergarten. Little Lincoln First Grade combines both online and offline components. Online each day, students watch four engaging teacher videos featuring teachers Mr. Reed Moore, Mrs. Triggle, and Dr. Algae, and play a variety of mini-games designed to reinforce daily learning objectives. Wellness is also incorporated into the curriculum through weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

To meet the needs of all students, there are many enrichment opportunities known as *Extend your thinking!* These are meant to challenge students who need it. In addition, there are opportunities called *Reteaching* for every subject. These activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in different ways.

**Mathematics 1**

In Mathematics, first grade students will begin to dive deeper into mathematical thinking and problem solving. Students will be able read, write, and count from 0 to 100, with place value being introduced. Addition and subtraction facts to 20 will be learned, and by the end of the year students will add and subtract three-digit numbers. Shapes, patterns, and geometric reasoning will be explored. Additional units include measurement and data. Students will use problem solving techniques in order to solve every day math situations.

**Reading 1**

The goal of Reading 1 is to build an independent, lifelong reader. Phonics is heavily emphasized, as students learn short and long vowel sounds, consonant blends, and silent letters to become confident readers. These skills will be used to read grade appropriate fiction and nonfiction literature. First graders will be able to sequence story events, identify cause and effect, retell a story, and use context clues to determine the meaning of unknown words. Grammar is highlighted as students learn parts of speech, types of sentences, proper use of punctuation, and the parts of a sentence.

**Science 1**

Students are encouraged to become budding scientists in Science 1. The scientific method and inquiry are taught, stimulating young minds to ask questions and explore the world around them. Students will complete experiments and investigations throughout the course. The main concepts investigated in first grade are natural resources, energy and work, simple machines, animals, the Earth and sky, the Solar System, and matter.

**Social Studies 1**

Social Studies 1 reinforces the concepts introduced in Social Studies K. Students will continue to learn about other cultures and cultural diversity by exploring families around the world; different types of shelter, food, and clothing; and traditions. Map skills and geography are further investigated as students practice reading and using maps to locate and describe their homes and communities. Other content explored includes personal responsibility; American symbols and civics; distinguishing between past, present, and future; the concept of earning, saving, and spending money; basic needs; and transportation.

**Writing 1**

First graders will develop into writers and storytellers in Writing 1. Through the year, students will practice a variety of writing forms including alternate endings to stories, a book report, a personal narrative, a folktale, realistic fiction, letters, and poems. Students will enhance their writing using vivid verbs, adjectives, and synonyms. Pre-writing skills, such as story maps and diagrams will also be emphasized.
Little Lincoln Second Grade

Little Lincoln Second Grade students engage in daily lessons in math, reading, writing, social studies, science, and visual arts. Little Lincoln Second Grade combines both online and offline components. Online each day, students watch four engaging teacher videos featuring teachers Mr. Reed Moore, Mrs. Triggle, and Dr. Algae, and play a variety of mini-games designed to reinforce daily learning objectives. Wellness is also incorporated into the curriculum through weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

To meet the needs of all students, there are many enrichment opportunities known as Extend your thinking! These are meant to challenge students who need it. In addition, there are opportunities called Reteaching for every subject. These activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in different ways.

Mathematics 2

Mathematics 2 expands on the concepts introduced in first grade. Students continue to explore place value to the thousands place. The relationship between addition and subtraction, and adding and subtracting with and without regrouping is a focus through the year. Word problems and real life applications are practiced. Students will skip count by two, three, four, five, and ten, preparing them to work with money. The concepts of more than, less than, and equal to, and their corresponding symbols are introduced. Geometry and patterns are also covered.

Reading 2

In second grade, students become strong readers, building on the foundations of first grade. Phonics is continued to be highlighted, with reviews of consonant and vowel sounds, blends, ending sounds, and syllables. These foundational skills will be used to read a variety of literature including informational texts, stories, poems, articles, fairytales, biographies, and longer chapter books. Students will continue to refine their comprehension skills. Grammar and spelling is emphasized as students mature into independent readers and writers. Learning to use resources such as dictionaries and other reference materials is introduced.

Science 2

Science 2 students will continue to explore their world through a variety of observations and hands-on activities. The scientific method and technology will be investigated throughout the year. Animal habitats and environments are a major subject of study. Students will make careful observations of the sun, moon, stars, sky, and Earth, and experiments about light, heat, and energy will be conducted.

Social Studies 2

Social Studies 2 will teach students about American civics and government, with an emphasis placed on being a good citizen. Early American history is explored beginning with explorers and continuing to colonization. Map skills will be reinforced and practiced, with students being able to identify cities, states, countries, and continents. The basics of economics will be explored, including topics such as saving and spending money, taxes, and jobs and careers. Students will also learn about different cultures around the world.

Writing 2

Writing 2 includes handwriting and producing works of written communication. Cursive writing is introduced and practiced throughout Writing 2. Students will create a variety of writing products using the steps of the writing process. Types of writing students will create include opinion essays, articles, informational paragraphs, a research report, instructions, fables, stories, letters, and a biography.
Calvert

Calvert Third Grade

Calvert’s third grade curriculum features *Smiling Hill Farm*, a classic children’s book. This is the first piece of literature your child will read on his own. Composition helps your child further develop organization in writing. Third grade writing creates a more natural continuum from Grade 2 through Grade 4. The new accompanying workbook gives students the opportunity for practicing newly acquired skills. Third grade students also begin to learn about ancient mythology and art history, two subjects that prepare students for greater literature appreciation. Using the Singapore math method, students work with lessons that emphasize problem solving and the use of visual representations to perform addition and subtraction with and without regrouping to the hundreds place, develop skills in fractions, multiply and divide to the hundreds place, work with metric and customary measurements, and calculate area and perimeter of two-dimensional shapes. Science involves the study of life cycles and force and motion, while social studies helps students learn about how communities form and work together. Third grade content includes Reading, Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Mythology; Art History; Art; and Technology.

Calvert Fourth Grade

Calvert’s fourth grade curriculum is exciting as students compose original compositions. The reading program relies on classic children’s literature and poetry, with lessons designed to increase comprehension, appreciation, and analysis. It includes new books and strategies for drawing inferences, studying root words, and analyzing story elements. Additionally, tips on differentiation help Learning Guides adjust the lessons to fit students of different ability levels. In math, students build an understanding of math skills and concepts through the Singapore math method. Students work with lessons that emphasize problem solving and the use of visual representations to interpret data, create tables and graphs, add and subtract like and unlike fractions and mixed numbers, express decimals as fractions and mixed numbers, measure angles, and find area and perimeter. The science program covers life science and physical science units, such as electricity and magnetism. Social studies explores the history, geography, and resources of the United States. Fourth grade content includes Reading, Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Art; and Technology.
Calvert Fifth Grade

In Calvert’s fifth grade curriculum, students begin to learn connections between American history, literature, and geography by reading classic historical novels such as *Sing Down the Moon* and *The Sign of the Beaver*. Essential writing skills continue to be developed, including writing paragraphs, outlining, and summarizing. In math, students work with lessons that emphasize problem solving, the use of visual representations, and Singapore math strategies to multiply and divide fractions, simplify algebraic expressions, represent ratios in fraction form, multiply and divide decimals, and classify polygons. In science your child will study plants, weather, climates, and ecosystems, while social studies surveys American history. Fifth Grade content includes Reading; Phonics, and Literature; Spelling and Vocabulary; Writing and Composition; Grammar; Poetry; Mathematics; Science; History and Social Studies; Geography; Art History; Art; and Technology.

Lincoln Interactive Third Grade

**Language Arts 3**

Language Arts 3 combine reading, writing, grammar, spelling, and handwriting into a comprehensive course. Students will explore diverse fiction and nonfiction, reading novels, poems, informational texts, plays, and biographies. Students will use comprehension skills to analyze and respond to these pieces of literature. Using the steps of the writing process, a variety of writing pieces will also be produced, including stories, articles, reports, letters, and poems. Proper grammar is also taught, including elements such as the parts of speech, proper capitalization and punctuation, figurative language, verb agreement, and types of sentences.

**Mathematics 3**

Students in Mathematics 3 will refine their addition and subtraction skills, by working with three- and four-digit numbers with and without regrouping. The concept of multiplication and division are introduced, and students will be expected to understand and master multiplication and division facts through 12 by the end of the year. Fractions are reviewed, and students will understand the relationship between fractions and decimals. Mathematics 3 also includes studies of time, money, geometry, measurement, and data and graphing. Solving real word scenarios through word problems is emphasized.

**Science 3**

Students in Science 3 become junior scientists as they complete a variety of hands-on experiments. They will learn to document observations and results in a science lab journal. The scientific method is introduced, and junior scientists will use it to conduct investigations related to geology, biology, physics, earth science, and wellness. Students will be able to discuss the properties of rocks, soil, and fossils; the characteristics of different natural disasters; various types of land formations; and health and nutrition.

**Social Studies 3**

The focus of Social Studies 3 is the concept of community. Each unit explores a different topic related to this central theme. An in-depth study of geography, landforms, maps, and globes in conducted. Students will study their local community to discover its location, population, and other facts. Students will understand early American history, identify key figures through the development of our country, and understand how those people contributed to their communities. Additional topics of study include American government, economics, and cultures around the world.
Lincoln Interactive Fourth Grade

Language Arts 4

Language Arts 4 combines reading, writing, spelling, grammar, and handwriting. Throughout the year, students will read novels, poetry, myths, and a wide variety of fiction and nonfiction pieces. Students will practice identifying an author’s purpose, and will make entries in a reading journal. Graphic organizers and charts will be created and used to compare and contrast information from their readings, and make connections through writing. Reference materials such as the dictionary and thesaurus will be utilized to improve students’ understanding of words. Students will expand their knowledge of grammar by learning the parts of speech, proofreading and editing their writing, and giving an oral presentation.

Mathematics 4

In Mathematics 4, students build upon their knowledge of basic multiplication and division facts. They will understand the relationship between operations, and begin to multiply and divide with larger numbers. Coordinate planes and graphing is introduced, and students explore additional geometric concepts including properties of polygons, measuring angles, and performing transformations. Additional topics studied include measurement, data, money, and graphing. Real life scenarios will be solved through the use of problem solving techniques.

Science 4

Science 4 students will continue to develop into scientists as they create a science journal to record notes, drawings, questions, and data from the scientific experiments they complete through the year. Through their investigations, students will learn about famous scientists, properly use scientific instruments, and display data in diagrams, tables, and graphs. Safe experiments will be conducted relating to the fields of biology, earth science, ecology, astronomy, geology, light and electricity, physics, anatomy, and wellness.

Social Studies 4

Social Studies 4 introduces the five themes of geography to students by studying the regions of the United States. Students will practice reading and interpreting maps, globes, graphs, and tables. Students will investigate factors that contributed to the development of American cities and industries in specific regions of the country. The United States political system, including the branches of the government, and differences between local, state, and national governments will be discussed. Students will analyze the historical, geographic, political, economic, and social structure of each region of the United States.

Lincoln Interactive Fifth Grade

Language Arts 5

Language Arts 5 is a course with many layers. It is designed around the idea that every student is capable of learning the concepts and material presented throughout the course. In Language Arts 5, students will read several selections. Along with each weekly reading selection, students will encounter new spelling and vocabulary lessons. They will improve their grammar, reading, and writing abilities through weekly skill practices. Students will also learn proper writing strategies and techniques throughout this course. They will follow the writing process to create both fiction and nonfiction essays.

Language Arts 5

In Language Arts 5, students will continue to focus on reading, writing, listening, and speaking through online lessons, interactive elements, videos, and educational games. Students will have the opportunity to self-select a novel to read and use that piece of literature to focus on plot, main idea, characters, and other literary elements. There is an emphasis on reading and understanding informational texts, and comprehension strategies to use before, during, and after reading. Other genres of literature, including poetry and drama, will help students learn and understand structure, theme, and figurative language. Descriptive, narrative, expository, technical, and persuasive pieces will be written, while learning and using the steps of the writing process. In addition, learners will gather information about a research topic, evaluate sources, take notes, cite sources, and present research. Students will hone vocabulary skills,
practicing word analysis and decoding, determining the meaning of unknown words, and understanding word relationships. Grammar and language skills such as sentence types, punctuation, capitalization, and spelling are also taught. Listening and speaking skills are refined as students become engaged in group discussions, write a speech, and demonstrate effective communication skills.

**Mathematics 5**

In Math 5, students acquire mathematical building blocks that serve as a foundation for higher level math courses. Students enrolled in this course learn about place value, addition, subtraction, and multiplication of whole numbers and decimals. Other topics include multiplication of variables and expressions, basic algebraic concepts, division of whole numbers and decimals, divisibility, prime and composite numbers, graphing, probability, and geometry concepts. As students progress through the year, they will also gain an understanding of fractions by studying the relationship between fractions and decimals, and addition, subtraction, multiplication, and division of fractions. Also, addition and subtraction of mixed numbers, linear measurement and perimeter, area, time, and temperature will be discussed.

**Mathematics 5**

Mathematics 5 will require students to apply knowledge of decimal place value, multiplication and division of multi-digit numbers, measurement systems including metric and customary units, and data interpretation and representation. As students progress further through the course, they will learn how to measure volume, determine patterns in place value, and classify two-dimensional figures. Throughout all of this course, students will continue to demonstrate how to add, subtract, multiply, and divide whole numbers, fractions, and decimal numbers, as well as how to write and interpret numerical expressions. Basic pre-algebra skills, including graphing points on a coordinate plane, analyzing pattern relationships, and generating numerical patterns based on specific rules will be introduced.

**Science 5**

Science 5 is made up of four units: life science, Earth science, physical science, and space science. The unit on life science includes the classification system, cells, the human body, plants, and ecosystems. Moving into Earth science, students will learn about oceans, the water cycle, weather, rocks and minerals, volcanoes and earthquakes, and the Earth’s resources. During this unit on physical science, students discover topics such as matter, motion, simple machines, energy, and electricity. The course ends with a unit on space science, where students will learn about the planets, stars, the moon, the sun, and the Earth.

**Science 5**

Students enrolled in Science 5 will review the scientific method, and be introduced to technology, engineering, and the design process. The environment will be discussed, as they explore the water cycle, different ecosystems, and the importance of recycling. As students proceed through the course, they will complete a study of Earth and space, including climate and weather. They will continue to learn about life science, and also be introduced to the basic principles of chemistry and physics.

**Social Studies 5**

Social Studies 5 will introduce students to several Native American groups and early settlers of the United States. European explorers and the Spanish will also be discussed. African hardships will be covered along with civilization of the early colonies. Early American wars such as the French and Indian War, the American Revolution, and the War of 1812 will be described. Learners will be taught about the Civil War and the division that grew between the North and South due to their differing perspectives on slavery, government, and war. Key concepts to cover will include the Battle of Gettysburg, end of the Civil War and Slavery, Reconstruction, and the 13th, 14th, and 15th Amendments. Main points, battles, and victories of World War I and World War II, as well as the Cold War will be highlighted. The current American government and the American people will round out the conclusion to Social Studies 5.
Social Studies 5

Social Studies 5 is a study of United States history, beginning with the earliest American civilization, continuing to the development of the American colonies, and finishing with modern-day America. Students will begin the course by using maps to learn geography skills. Initial topics include early American civilization, Native American tribes, European exploration, and the colonization of North America. Social Studies 5 then focuses on the Revolutionary War; principles and documents of government; growth and westward expansion; federal, state, and local government; patriotism; and the rights and responsibilities of citizenship. This course also teaches the concepts of basic economics including scarcity and choice, productive resources, supply and demand, distribution of goods and services, and advertising. Topics such as economic interdependence and international trade; multi-national corporations and economic organizations; income, profit, and wealth; costs and benefits of saving and borrowing; entrepreneurship; and careers and income are explored as well.

Notes
Sixth Grade

Language Arts 6
Language Arts 6 explores several types of literature. Students will read and analyze intriguing stories written by famous and influential authors. The course will cover the writing process and effective writing techniques, and students will produce their own pieces of literature in multiple genres, including short stories, compare-contrast essays, how-to essays, and numerous other responses to literature. Proper conventions of grammar are reinforced, including nouns, pronouns, adjectives, relative and interrogative pronouns, verbs, adverbs, prepositional phrases, adjective phrases, simple sentence structure, punctuating words in a series, and understanding and using clauses.

Mathematics 6
Mathematics 6 provides a solid foundation by covering topics such as expressions, equations, graphing, measurement, and statistics. Prime numbers, factoring, and divisibility rules will be taught, and students will continue to practice adding, subtracting, multiplying, and dividing fractions and decimals. Ratios and percentages are introduced and practiced. Students are also taught to collect and interpret data and display their findings through graphs. Students will learn to recognize patterns, work with variables, and determine how integers are used in real-world situations. Geometry concepts such as triangles, angles, perimeter, and area will be explored. As the course progresses, students will learn about circles, 3-D figures, surface area, and the volume of different prisms.

Science 6
Science 6 engages students in the remarkable world of science. Students will become mini-scientists while investigating and gaining an understanding of important topics in science, such as the classification of animals and their unique behaviors, the planet Earth and its fascinating features, and the constructive and destructive forces that affect our planet. Students will continue their journey through Science 6 learning about such topics as the effects of weather and climate, the importance of the atmosphere, and the shocking facts about electricity and magnetism. The use of labs and videos will help students extend their knowledge and enhance their understanding of science in their life.
Social Studies 6

Social Studies 6 focuses on world history from the beginnings of human civilization to the present day. The connections between geography and history are explored and evaluated. Social Studies 6 begins with a study of the Stone Age, the Persian Empire, and ancient Egypt and its advances in science and medicine. Students will then move on to explore various world religions, such as Hinduism and Buddhism. Lessons include discussions of early Chinese and Greek societies and cultures, and the rise and fall of the Roman Empire. The Byzantine Empire, Muslim and Islamic beliefs, the Ottoman Empire, and various regions of Africa are examined. Students are introduced to the early civilizations of Europe during the Middle Ages. The Renaissance and Reformation periods in Europe are investigated, leading to a study of the rise of monarchies and the English, American, and French revolutions. Finally, students will end the course with an introduction to World War I, World War II, the Cold War, and the world since 1945. Throughout this course, students complete interactive online activities and watch videos that explain world history and enhance the course. Students will build map skills to better understand the world, and refine their reading, writing, and geography skills.

Seventh Grade

English 7

English 7 focuses on the study of grammar, literature, and composition. Students will learn about elements of grammar such as figures of speech, pronouns, clauses, subjects, and predicates. The fiction selections have been chosen from a variety of literary genres including short stories, poetry, drama, myths, and folk tales. Students will also read nonfiction texts such as autobiographies, biographies, essays, consumer documents, public documents, and workplace documents. Reading selections provide students the opportunity to improve reading comprehension skills, develop vocabulary, make inferences, and explore foreshadowing. Students will also analyze cause and effect, point of view, characterization, and author’s purpose. Formal writing assessments include compare and contrast essays, a fictional narrative, a descriptive essay, and a persuasive essay.

Mathematics 7

Students in Mathematics 7 will work with equations, factors, integers, proportions, rates, and ratios. In addition, students continue to practice adding, subtracting, multiplying, and dividing fractions, decimals, and integers. They will learn to solve one- and two-step equations and will use proportions to solve real-world problems. Students will also develop an understanding of the coordinate plane by working with ordered pairs, linear and nonlinear functions, and patterns. Geometry is a large unit of study within Mathematics 7. The study of geometry will include lines, rays, segments, angles, triangles, quadrilaterals, circles, irregular figures, prisms, and cylinders. Experimental and theoretical probability, as well as permutations and combinations will also be explored.

Science 7

Science 7 explores many aspects of science, including life, physical, Earth, and space sciences. Students will explore the cell and all of its working parts before being introduced to Earth’s organisms and their processes. An investigation of the Earth’s water and atmospheric processes will be conducted to determine how each produces energy systems. Students will explore structural changes involving the Earth, ranging from the past to the present. This investigation will include the rock cycle, plate tectonics, and mineral formation. Students will inquire about the history of our universe and what it means to live in an Earth, Moon, and Sun system. Students will examine motion, forces, and various types of energy. Finally, students will examine types of sound and light energy.

Social Studies 7

Social Studies 7 encourages students to think like geographers by teaching them to study the Earth according to the five themes of geography. Students will use these themes to determine why things are located where they are, such as a region, an ethnic group, a landform, or a trade route, and they will determine why these things can be found in particular places. The answers to these basic questions will also equip students to more fully understand the geography, history, culture, regions, and contemporary issues facing the people of the Americas, Europe, Russia and Asia, Africa, and the Pacific World. Interactive elements will expose students to how each of these places has been shaped by history, but has also developed a rich, thriving culture that can be seen today.
Eighth Grade

English 8
In English 8, students will examine literary concepts by reading, interpreting, and writing about a variety of literature and other cultural texts. A broad selection of readings are surveyed while studying the structures of different literary genres, the elements of narratives and of characterization, literary devices and themes, and the concepts of style and grammar, with the main focus on reading skills and understanding what is read. Students learn reading strategies appropriate to the different genres of literature and apply these strategies to the readings. Writing and grammar skills are emphasized in the context of literary pieces and are reinforced with practice and essay writing. Students will be required to complete a research project that introduces students to the concepts of quality research, citations, and formal writing.

Mathematics 8
This course will explore a variety of mathematical concepts to prepare students for success in future high school mathematics courses. Through real-world applications, students will work with rational numbers, algebraic equations, graphs and functions, real numbers, exponents, and the coordinate plane. Students will focus on concepts that prepare them for Algebra, including solving multi-step equations, graphing lines, and interpreting slope. Geometric concepts will also be investigated, including angles, polygons, and volume of solid figures. Additionally, students are introduced to elementary statistics.

Science 8
This course introduces eighth grade students to an integrated approach to physical, environmental, and life sciences. Students will study science concepts and problem solving while exploring a wide variety of aspects of the living and non-living world of science around them. The first part of the year is a study of life science. Students investigate important topics in histology (cells), heredity, and the biology of living organisms. Students will be given the chance to identify cells and cell compounds, and describe the cell in its environment. Learners will then examine different cell processes that lead to energy within the cell. Genetics and heredity will also be explored as students discover the importance of Gregor Mendel and his work with heredity. Adaptation, natural selection, and the evolution of organisms is examined. During the second half of the year, topics involving meteorology, geology, astronomy, and physics are explored. Different types of geological processes throughout Earth’s history will be investigated. Students will analyze the formation and composition of various planets and celestial bodies.

Social Studies 8
Social Studies 8 teaches students about American history and society, from the first human migrations to the Americas to the European colonization of the Americas and the founding of the United States, through the end of the Reconstruction period after the Civil War. Students will explore the causes and effects of the French and Indian War, and will study the First Continental Congress, Declaration of Independence, and challenges of governing a new nation. The course will move through the growth of the United States, including its political landscape in the early 1800s, and slavery and territorial expansion.

Social Studies 8
Social Studies 8 teaches students about American history and society, from the first human migrations to the Americas to the European colonization of the Americas and the founding of the United States, through the end of the Reconstruction period after the Civil War. Students will explore the causes and effects of the French and Indian War, and will study the First Continental Congress, Declaration of Independence, and challenges of governing a new nation. The course will move through the growth of the United States, including its political landscape in the early 1800s, and slavery and territorial expansion. The second half of the course is an exploration of the United States after the Civil War. The Westward Expansion and Industrial Revolution, and their implications for the future growth of the country are discussed in depth. The course then progresses into the wars of the 20th century, including the Spanish-American War, World Wars I and II, and the Korean War. In addition, the Great Depression, the Holocaust, and the Civil Rights Movement are examined. The course concludes with a study of the terrorist attacks of September 11, 2001, and America’s role in the global economy.
**Art and Music Exploration**

Art and Music Exploration will introduce visual art and music as artistic forms, as well as provide an opportunity for students to experience the arts and discover how the arts add richness to our lives. This course presents many different styles and works of art and music, and teaches students about Pennsylvania artists and musicians. Audio podcasts, videos, and web-based activities keep learners engaged in order to develop a new appreciation for the arts. The first portion of the course focuses on how art is created, while the second portion focuses on music. Together, they show how art reflects and influences history and culture.

**Fine Arts 8**

Fine Arts 8 includes a study of both art and music. Students are introduced to art history, art theory, and the elements and principles of design, as well as the study of music theory and the elements of music. By the conclusion of this course, students be able to make critical judgments about different forms of art and enhance their critical listening skills.

**Notes**
Physical Education and Health (K-8)

Physical Education K-6
Pennsylvania Public School Law requires all students to complete an annual course in physical education. In compliance with the law, the school requires elementary students in grades K through 6 to complete 36 hours of organized, supervised physical activity each school year. Students will receive a physical education kit, which includes a workbook and items to complete different physical activities. Students are required to complete at least half of their physical education hours using the items they receive in the physical education kit. Students are also required to record their physical education hours in the PA Cyber Physical Education Log.

Physical Education 7-8
Pennsylvania Public School Law requires all students to complete an annual course in physical education. In compliance with the law, the school requires students in grades 7 and 8 to complete 72 hours of organized, supervised physical activity each school year. Students will receive a physical education kit, which includes a workbook and items to complete different physical activities. Students are required to complete at least half of their physical education hours using the items they receive in the physical education kit. Students are also required to record their physical education hours in the PA Cyber Physical Education Log.

Starting the Road to Wellness
Starting the Road to Wellness is a one semester course suitable for students in grades 5 through 8 that encompasses a variety of topics with a focus on nutrition and physical fitness. The course includes basic nutrition principles and practices in addition to food safety concepts. Students are taught to read labels and how to understand dietary guidelines. Other areas addressed include the foundations of physical fitness, exercise guidelines, and sports nutrition. This course will help students become self-motivated about leading a healthy lifestyle.
Middle School Health

Middle School Health has been designed as a guide to introduce students in grades 7 and 8 to many health-related aspects they may encounter in middle school. This one semester course focuses on topics such as health and wellness, healthy relationships, violence, drugs and alcohol, diseases, and bodily changes. This is an exciting and fun course that will make students aware of ways in which they can become healthier and make health-conscientious decisions now and in the future.

Arts Alive (K-7)

First through seventh grade students are required to take an Arts Alive! Junior course each school year in order to meet the state’s Fine Arts requirement. There are three levels for each course: Primary (Grades 1-3), Intermediate (Grades 4-5), and Middle (Grades 6-7). Students will complete the course to fulfill the state requirements for Fine Arts.

Arts Alive! Junior is an engaging, video-based arts series. It is designed to raise awareness and improve understanding of the creative and performing arts, including music, visual and media arts, dance, theatre, and the literary arts. Arts Alive! Junior will focus on the role of the arts and artists in society, and it will identify the impact of art in the lives of students. Each course includes videos that bring the arts to life. Grade-appropriate activities and response questions will inspire students to become involved in the arts, and will assess understanding of the material and concepts presented. Every Arts Alive! Junior video, activity, and assessment is aligned with state and national standards.

Arts Alive! Junior Theme One – Seeing, Hearing, Thinking, Feeling

This course will help students develop interdisciplinary thinking about art and will allow them to become involved in the subject area while learning about art fundamentals in all disciplines. Students will also study the development of techniques for perceiving, interpreting, and decoding works of art.

Arts Alive! Junior Theme Two – Around the World

This course furthers the development of students’ skills for understanding and interpreting works of art. Key concepts include artwork that embodies diversity, ethnic differences, nationalism, and multiculturalism.

Arts Alive! Junior Theme Three – America: An Arts Melting Pot

The third year of Arts Alive! Junior is devoted to providing students with opportunities to experience, analyze, and interpret how different ethnic cultures have made enormous contributions to American culture through the creative and performing arts. In the early 19th century, the term “melting pot” gained popularity as a description of the way diverse nationalities, ethnicities, and cultures began to come together to form a uniquely American culture. The arts were, and continue to be, a major part of this process, helping people to communicate in distinct ways, and to create and sustain rich and vibrant communities.

Arts Alive! Junior Theme Four – Let’s Get Creative

Creativity is the ability to produce or do something new, to solve a problem, or to develop or adapt a work of art or artistic form. The fourth year of Arts Alive! Junior is dedicated to exploring the role of personal and collective creativity in arts – and in everyday life.

Arts Alive! Junior Theme Five – STEAM-Powered Learning

This year of Arts Alive! Junior presents an innovative vision for blending science, technology, engineering, and math (STEM) with the creative and performing arts to generate STEAM. This unique exploration will equip students to become critical thinkers and creative problem solvers, and to develop the skills necessary to collaborate successfully on interdisciplinary projects.
Arts Alive! Junior Theme Six – What’s the Big Idea?
Arts Alive! Junior Theme Six offers an engaging exploration of the ways in which the creative and performing arts help us to think about the “big ideas” in our lives. A big idea is any topic that is of vital importance to people, can be examined in many different ways, and from many different perspectives. The development of critical thinking skills is the essential goal of this exploration, helping the learner to productively consider significant issues related to life and death, good and evil, and love.

Arts Alive! Junior Theme Seven – 21st Century Skills: The Way of the Artist
In recent decades, our world has undergone dramatic shifts. Unprecedented advances in digital technology and communications, a highly competitive economic environment, and both the promise and peril of globalization have tremendously altered society, creating unparalleled challenges for both individuals and groups of people. In this theme of Arts Alive! Junior, students will explore a core set of skills that experts believe will be essential to success in the 21st Century, and how those skills can be developed in and through the creative and performing arts. An esteemed panel of five artists, each representing a different art form, will demonstrate how they have personally used and developed the core set of 21st Century skills in and through their work.

* Students enrolled in Kindergarten will have their Fine Arts requirement met through their curriculum (Little Lincoln or Calvert).
* Students enrolled in Grade 8 must take either Fine Arts 8 (VC) or Art and Music Exploration (AC).

Lincoln Explorations (3-5)
Become a Lincoln Explorer by taking one of Lincoln Interactive’s Explorations courses. These nine-week, four-unit enrichment courses are designed for students to explore new and interesting areas of study. Enroll now and begin your journey toward learning something new!

Exploring Music
This course is designed for beginning musicians with little or no background in reading music or playing a keyboard. Exploring Music offers an introduction to basic keyboard skills and note reading. This is a hands-on course where students will practice new skills on a real keyboard. Students will use proper technique to learn the keys of the keyboard, note names and values, and treble and bass staff lines and spaces. In addition, this course will discuss musical elements such as the repeat sign, time signatures, and measures.

Exploring the Kitchen
Exploring the Kitchen will familiarize students with tools, appliances, and common kitchen etiquette including how to set a proper table, safety techniques, and cleanliness. Students will complete basic recipes using beginning cooking techniques. Learners will receive some cooking supplies to use throughout the course. However, each student is responsible for purchasing the food for each recipe at his/her local grocer, and all purchases are non-refundable. Due to food allergies, some ingredients can be substitutes or eliminated.

Exploring French
Exploring French is an introduction to the French language and Francophone cultures. Novice language learners will explore the diverse cultures and traditions of the French-speaking world while developing essential communication skills. In addition to learning basic vocabulary, including the alphabet, numbers, colors, and days of the week, students will learn to greet others and introduce themselves, describe people and things, and express their likes and preferences. They will recognize similarities and differences between English and French and make comparisons between their culture and Francophone cultures. Exploring French introduces the language and cultures of the Francophone world through a variety of disciplines, such as history, science, and the arts.
Exploring German

In Exploring German, students will be introduced to the German language and culture. They will learn basics such as greetings, the alphabet, numbers, and colors. Students will also learn to form simple sentences and carry on simple conversations. Although the Exploring German course focuses mainly on the German language, cultural aspects are integrated throughout. The purpose of Exploring German is to spark an interest in the language and provide a base knowledge of it.

Exploring Spanish

Exploring Spanish is an introduction to Spanish language and culture. Students will learn basics such as greetings, the alphabet, numbers, and colors. Additionally, students will use the Spanish language to communicate ideas and to describe themselves and the people and things around them. They will express preferences and carry on simple conversations. Although Exploring Spanish focuses mainly on the Spanish language, cultural aspects are integrated throughout. The purpose of Exploring Spanish is to spark an interest in the language while providing a base of knowledge for communication.

Lincoln Discoveries (6-8)

Discover new skills or an unknown talent by taking one of the Lincoln Interactive Discovery courses. These nine-week, four-unit enrichment courses are designed for middle school students and provide students with an opportunity to discover new and interesting areas of study. Enroll now and begin your journey toward learning something new!

Discovering Digital Drawing

Discovering Digital Drawing is for students interested in digital media. Drawing is the process of making art with lines – but in this course, pencils and markers will be put away! Instead, the digital counterparts to these traditional tools will be explored. This is an interactive course that assists students in creating dynamic compositions with just the click of a mouse and the stroke of the stylus. Students will learn to sharpen observation skills, to communicate ideas, and to express feelings while learning the language of Photoshop Elements. Rules of composition, the elements of art, principles of design, tricks that artists use to organize artwork, and virtual tours to museums and artists’ studios are included in this course.
Discovering Digital Painting

This course will teach students how to create exciting paintings in a matter of minutes by using only their computer and their imaginations. Learners will put their traditional paints, brushes, and canvases away because these days, artists are creating digital paintings for book covers, illustrations, and video games directly on their computers. Students will learn how digital painting is becoming an emerging art form in which traditional painting mediums such as watercolors, oils, and spray paints are applied using digital tools, software, and computers. After learning a few basic techniques, there are no limits to creativity!

Discovering Digital Photography

In this course, students will enter the fascinating world of digital photography. Students will cover basic features of a digital camera as well as the various techniques necessary for taking interesting and vivid digital pictures. Learners will find out how to create the best shots by adjusting the color, the lighting, and the set-up of a camera. This course also includes helpful editing tips that enable up-and-coming photographers to create high-quality photos. Discover the art of digital photography in this fascinating course!

Discovering Music

This course is designed for beginning musicians with some background in music or keyboard playing. Discovering Music will incorporate the performance aspects of music and an understanding of music theory. Students will use the keyboard to learn fun, creative songs with the use of Internet and interactive web pages. Students will be able to read notes on the staff and play pieces in C and G positions, identify and play melodic and harmonic intervals, and play C Major chords.

Discovering French

Discovering French is designed to introduce learners to the French language and culture. The course will focus on vocabulary and the fundamentals of French grammar, including nouns, articles, the present tense, and adjectives to enable students to talk about their classes, families, and daily activities. Students will also explore cultural topics like the French family, Bastille Day, and interesting activities and events aimed at children and their families in Paris.

Discovering German

Discovering German is an introduction to German language and culture. Students will learn about greetings and farewells, basic conversations, the alphabet, numbers, days of the week, food, home life, health and fitness, and sports, among other subjects. Additionally, students will use the German language to describe themselves and the people and things around them, express preferences and opinions, and make plans. Students will carry on simple conversations using basic grammar and verb conjugations. Students will make comparisons to English and other languages. Discovering German also presents geography and cultural aspects through which students will make connections to other subject areas. As a running thread throughout the course, students will complete a “Journey Across Germany,” exploring numerous places and landmarks. The purpose of Discovering German is to develop a student’s interest in the language while introducing culture and providing basic skills for communication.

Discovering Spanish

Discovering Spanish is an introduction to Spanish language and culture. Students will learn basic vocabulary such as greetings, introductions, family, school, and pastime vocabulary. Additionally, students will use the Spanish language to describe themselves and the people and things around them, express preferences and opinions, and make plans. Students will carry on simple conversations using basic grammar and verb conjugations. Students will make comparisons to English and other languages. Discovering Spanish also presents geography and cultural aspects through which students will make connections to other subject areas. The purpose of Discovering Spanish is to develop a student’s interest in the language while introducing culture and providing basic skills for communication.
9-12 High School

Graduation Requirements

Academic Track

The Pennsylvania Cyber Charter School is committed to providing its students with a well-rounded education in preparation for their future. Students will find a variety of curricular options to suit their needs and interests to fulfill the set requirements to graduate. Upon graduation, PA Cyber students will be college- and career-ready. The PA Cyber Graduation Requirements follow the guidelines set forth by the Commonwealth of Pennsylvania.

4.0 Credits English Language Arts
4.0 Credits Mathematics (1.0 credit in Algebra I required)
3.0 Credits Science (1.0 credit in Biology required)
4.0 Credits Social Studies
2.0 Credits Fine Arts
3.5 Credits Electives
1.0 Credit Physical Education
0.5 Credit Health
22.0 Credits Total Required for Graduation

* The Commonwealth of Pennsylvania and the Pennsylvania Cyber Charter School require all students complete a senior project to be eligible for graduation.

The Pennsylvania Cyber Charter School encourages parents to monitor their child’s progress toward meeting graduation requirements. Parents play a vital role in ensuring that their child has earned the required number of credits by their senior year. Typically, a student begins to accumulate credits as a freshman.

School of Engineering Track

The Pennsylvania Cyber Charter School provides high school students access to an effective, rigorous, and engaging STEM education. The PA Cyber School of Engineering provides students in grades 9-12 the opportunity to take courses in engineering, advanced science, and pre-medicine. Following specific graduation requirements, students in the program will be able to immerse themselves in various STEM courses that will prepare them for college study or to enter the workforce.

Through the use of collaborative technology, students will gain valuable insight into possible STEM careers that will prepare them for the demands of the 21st century workplace.

In addition to courses, PA Cyber is committed to providing various outreach programs and activities. In PA Cyber offices across the state, PA Cyber students have the opportunity to interact and participate in various types of hands-on and enrichment activities. Students also have the chance to listen to guest speakers, participate in clubs, and compete in science fairs to fulfill individual interests.

For more information about the School of Engineering, please contact your Academic Advisor.

4.0 Credits English Language Arts
4.0 Credits Mathematics (1.0 credit in Algebra I required)
4.0 Credits Science (1.0 credit in Biology required)
3.0 Credits Social Studies
3.0 Credits Engineering
2.5 Credits Technology/Multimedia & Business
2.0 Credits Fine Arts
2.0 Credits Electives
1.0 Credit Physical Education
0.5 Credit Health
26.0 Credits Total Required for Graduation – School of Engineering Track
English Language Arts
Four credits in English Language Arts are required for graduation.

English 9
English 9 introduces learners to elements of literature from classic to modern times using the genres of fiction, nonfiction, short story, novel, poetry, drama, and essay. The main works selected for this course are the epic *The Odyssey* and Shakespeare’s drama *The Tragedy of Romeo and Juliet*. Through reading, learners will develop skills in literary analysis and interpretation by establishing understandings of literary elements such as plot and setting, character, narrator and voice, tone and mood, symbolism and irony. Learners will also analyze nonfiction works for form, style, and persuasion. The study of poetry will include the analysis of poems by several poets, and students will understand poetic devices, including figurative language, tone, and diction. Skills for strengthening vocabulary, grammar, and mechanics will be examined as well, and lessons focusing on the stages of the writing process will be evaluated. The final unit of this course will focus on consumer and technical documents, as students will examine several real world texts, including online resources and workplace materials. Students will display a mastery of these forms through learning activities and assessments, including an examination of setting and characterization, writing narratives and persuasive essays, in addition to quizzes, exams, projects, and essays.

English 10
English 10 is focused on literature, grammar, and composition. Students will examine the different elements of a story, including plot, setting, character, narrator, and voice. To understand these concepts, students will read and respond to a variety of fiction and poetic works, including the classic works *Julius Caesar* and *To Kill a Mockingbird*. Strategies for strengthening vocabulary and grammar skills will be examined and practiced. Students will display mastery of these concepts through various learning activities and assessments, including tests, quizzes, writing assignments, project, essays, and journal exercises. Throughout the course, time is spent focusing on a research paper, parts of speech and grammar, reading and comprehension, and poetry. Upon completion of this course, students will be required to take the Keystone English Literature exam. **Pre-Requisites:** English 9
American Literature/English 11

In this course, students are invited to travel through the various cultural periods of American literature. Students will explore American literary traditions of the 19th century and will study the darker side of Romanticism while exploring the horror story genre, reading selections from author such as Edgar Allan Poe. Literature from the Civil War Era and stories of slavery such as an excerpt from the Narrative of the Life of Frederick Douglass will be analyzed. Post-Civil War literature pertaining to Native Americans, pioneers, settlers, and women is also addressed. A unit on the Age of Realism focuses on the authors Mark Twain and Bret Harte. Students will also compare and contrast works on Realism and Naturalism by focusing on the works of Jack London and Beck Weathers. Students will explore the Modern Era by reading a collection of poetry and modern American fiction works, including short stories and speeches. Students will learn about the Harlem Renaissance by reading and studying essays and poems from that era. Finally, the course will conclude with a study of the Contemporary Period, where students will read many different genres of literature, including poetry, drama, fiction, and nonfiction. Students will complete the course with a deeper understanding of the major contributions literature has made in the development of our country. Pre-Requisites: English 9; English 10

British Literature

British Literature provides students with a survey of British literature that includes texts from the Anglo-Saxon and Medieval eras, the English Renaissance, and the Restoration and Enlightenment eras. The second half of the course provides students with a survey of English texts from the Romantic Era, the Victorian Era, and the Modernist Era, as well as the mid to late 20th century (1900 C.E. - present). Readings in the course include Beowulf, Chaucer’s Canterbury Tales, Shakespeare’s Macbeth, and Swift’s Gulliver’s Travels. Students will wrap up the course by studying works from both the Modernist Era and the mid to late 20th century. Through a wide range of writing and thinking exercises, British Literature offers students numerous chances to understand, analyze, synthesize, and evaluate the texts they read. The readings for each unit will impart various themes, including historical context presented in those texts. By the end of the course, students will be able to think critically and communicate effectively with regard to the works covered in the texts and the eras encompassed by those works. Pre-Requisites: English 9; English 10; American Literature

Literary Explorations

The literature of the world is connected in one way or another. From the philosophical writings of the ancient world to the contemporary novels of today, literature is linked in a global, timeless communication that will continue on into the future. Literary Explorations attempts to pinpoint and analyze some of these connections. Whether it is the wisdom of Plato, the predictions of Orwell, or the imagination of Tolkien, avid readers can find similar themes, ideas, and truths that help to define the world around us. By identifying linkages in literature, readers may find themselves making their own connections by observing the world around them, watching films or television, reading the newspaper, and conversing with others. Readings in the course include Lowry’s The Giver, Gathering Blue, and Messenger; Rand’s Anthem; Bradbury’s Fahrenheit 451; Orwell’s Animal Farm and 1984; Skinner’s An cheat; Raffel’s translation of Beowulf; and Tolkien’s The Hobbit and The Lord of the Rings trilogy. Pre-Requisites: English 9; English 10; American Literature

AP English Literature

Maturity of Thought - Devotedness to Learning - Willingness to Transcend: These are the core tenets of Advanced Placement English Literature. An adherence to these will allow one to become a distinguished student of literature, composition, and everything in between. This course follows all of the curricular guidelines set forth by the College Board’s AP Course Description, and will allow students to study key authors, ideologies, and contexts while responding in writing. Students may receive college credit based upon completion of the course and a sufficient score on the AP Exam. This course is designed to teach students college level writing coupled with a distinct understanding of various literary genres. The introduction into these genres will take the class near and far, studying authors, poets, and dramatists of varied cultures and eras. A well-rounded education of literature sets students free to study the influence of an author’s work in their historical and cultural situation, as well as our own. As the author, their history, and their influence are studied, the student’s responsibility then, is to respond. Writing, discussion, and personal analysis will be the main modes of response. In order to study a piece of literature through
critical analysis, a student must be able to understand, explain, and evaluate a text on a variety of levels, genres, styles, and contexts, vocabulary, syntax, mechanics, and figurative language. These things and more will all be an important part to the collaborative study of literature. **Pre-Requisites:** English 9; English 10; American Literature; B letter grade or higher in previous English courses

**Classical Mythology**

This course establishes a solid foundation for the study of classical mythology by providing concise histories of Ancient Greece, Ancient Rome, and the European Renaissance. Learners will read a variety of myths that introduce characters such as gods, goddesses, monsters, heroes, and other deities. Vocabulary that derives from Greek and Latin words will be introduced. Lessons will examine how mythology is incorporated into our Western culture through the naming of planets, weeks, weekdays, and so on. Artwork, poems, and music will also be explored in terms of classical references. Learners will demonstrate their knowledge of the content through a variety of writing assignments, including a compare and contrast research paper, characterization; letter, myth, and critique writing; and the creation of an advertisement and collage. **Pre-Requisites:** None

**Global Mythology**

Global Mythology offers students an interactive way to learn about myths found throughout the world. Each unit focuses on a particular region and its culture: Europe – Greek and Roman culture; Asia – Asian culture; North and South American – Native American culture; Africa – African and Egyptian culture; and Australian culture. Students will carefully study these cultures and their myths, which will introduce a variety of characters such as gods, goddesses, monsters, heroes, and deities. Mythical places and sacred locations will also be examined, and relevant vocabulary words will be introduced. Lessons will analyze how mythology is incorporated into our Western culture. Artwork, poems, and music from relevant cultures will also be incorporated. Learners will demonstrate knowledge of content through a variety of writing assignments. **Pre-Requisites:** None

**Essentials of English Usage**

Essentials of English Usage serves as an introductory or a refresher course to grammar, and covers effective writing, sentence skills, parts of speech, modifiers and parallelism, punctuation and mechanics, and word usage. Students will master standard English so they can succeed in the classroom, the workplace, college, or a technical area. Students will also build a working vocabulary throughout the course. **Pre-Requisites:** None

**Introduction to Short Stories**

In this course, students will read various short stories and will learn about the literary elements of plot, character, point of view, and setting, as well as suspense and irony. Students will become acquainted with the compact nature of the short story literary form and each author’s ability to weave exciting, interesting narratives in such short, tight spaces. Students will also learn the importance of being concise and will recognize that good literature does not necessarily have to be lengthy in order to be captivating. **Pre-Requisites:** None

**African American Literature**

In this course, students are invited to travel through the various cultural periods of African American literature. This course explores the narratives of Africans and African Americans who have made significant contributions that have shaped the world. Students will be exposed to African American literature and culture, from the past to the present, and will learn how this literature has been used to strive toward a better future for all African Americans. Students will begin the course by learning about the period from prehistory to 1750. The course then examines African American literature in the pre- and post-Civil War eras. The course finishes with modern selections from such writers as Martin Luther King, Jr., Ida B. Wells, Langston Hughes, Maya Angelou, and Queen Latifah. **Pre-Requisites:** None
Young Adult Literature

This course will give students the opportunity to become lifelong readers by being exposed to quality young adult literature (YAL) and by being able to connect to teenage protagonists. Various themes and coming of age issues will be addressed throughout this course making the literature relatable and interesting. Today, 21st century students face different issue than 20th century teenagers, and there is a plethora of YAL that can help the teens of today cope and resolve conflict in their own lives. The course will explore themes of alienation, family issues, self-discovery, relationships, and survival. Young Adult Literature has a heavy reading load, and will require students to read outside of class. **Pre-Requisites:** English 9; English 10

Technical Writing

This course will introduce written communication skills that are needed specifically in business and industry. Technical Writing enables students to understand the different documents required in a business environment. While studying rules of grammar and mechanics, students will apply newly learned skills to perfect their technical writing abilities. Varied assessments will provide students the opportunity to properly format sample technical documents. Students will demonstrate knowledge of content through a variety of assignments such as journal writing, attaching documents and e-mails, directional writing, memoir, and letter writing. **Pre-Requisites:** None

Creative Writing

Creative Writing is a workshop course in which students discover, analyze, and apply the methods and styles used in various forms of fiction, creative non-fiction, drama, and poetry. It emphasizes experimentation, practice, and taking cues from published writers and poets. The course also gives students the opportunity to express themselves while learning different genres and writing rules. Writing is a craft, a process, and a form of art in itself. Creative Writing not only provides all participants with an opportunity to express themselves, but also supplies focus on word choice, diction, form, editing, idea generation, and other skills useful in nonfiction writing. The one way to become a good writer is by writing, and students will do a great deal of writing in this course. **Pre-Requisites:** None

Mathematics

Four credits in Mathematics, including Algebra I, are required for graduation.

Pre-Algebra

Pre-Algebra teaches students about expressions, integers, equations, inequalities, decimals, factors, fractions, exponents, ratios, proportions, and percents. In the second half of the course, students will work with equations and inequalities, linear functions and graphing, data analysis and probability, and polynomials. There is an emphasis on the use of technology, problem solving, critical thinking, and reasoning. The course provides students with an introduction to geometry and a solid foundation for Algebra I. **Pre-Requisites:** None

Algebra I

Algebra I is an exploration of variables, function patterns, graphs, and equations. Students are expected to describe and translate graphic, algebraic, numeric, and verbal representations of relations and use those representations to solve problems. The second half of the course introduces students to rational numbers, systems of equations and inequalities, exponential functions, factoring, and quadratic equations and functions. Algebra I provides a solid foundation for further study in mathematics by helping students develop computational, procedural, and problem solving skills. Upon completion of Algebra I, students will be required to take the Keystone Algebra I exam. **Pre-Requisites:** Pre-Algebra
Geometry

Geometry investigates points, lines, planes, reasoning and proof, parallel and perpendicular lines, relationships within triangles, and quadrilaterals. Other topics investigated include similarity, right triangles and trigonometry, transformations, area, surface area, volume, and circles. Technology is stressed and integrated into lessons and exercises throughout the course in order to improve students’ overall understanding and performance of geometric concepts. Goals in the study of geometry are the development of reasoning ability, problem solving, and critical thinking.

Pre-Requisites: Pre-Algebra; Algebra I

Algebra II

In Algebra II, students analyze situations verbally, numerically, graphically, and symbolically. Students will become proficient at solving equations and inequalities. Students extend their knowledge of algebraic expressions, absolute value, functions, and graphs. Writing and graphing linear equations and inequalities, and studying problems which solve systems of equations, inequalities, quadratic expressions, and complex numbers is a major component of this course. Rational expressions, roots and radicals, operations with complex numbers, and quadratic equations are covered in the second half of the course. In addition, students explore trigonometric functions, sequences and series, probability, and matrices.

Pre-Requisites: Pre-Algebra; Algebra I

Trigonometry

This course begins by covering basic fundamentals of trigonometry. It accelerates quickly into more advanced trigonometry applications that encompass principles of science, technology, and engineering. Students will explore concepts from radian and degree measurement to unit circles, trigonometric functions, and sine and cosine functions.

Pre-Requisites: Pre-Algebra; Algebra I; Geometry; Algebra II

Statistics

This course teaches methods and terminologies of descriptive and inferential statistics. Students who complete this course will be able to conduct their own analyses of standard one-sample or two-sample data sets, follow statistical reasoning, and read statistical reports with understanding. Additional topics include association and regression, causation and evidence, and probability. Introductory topics in linear regression and analysis of variance will also be discussed. A college-level textbook is utilized for this course. Students are also encouraged to take the course concurrently with Pre-Calculus or Calculus when possible.

Pre-Requisites: Pre-Algebra; Algebra I; Algebra II; Grade of B or higher in Algebra II or strong recommendation of teacher

Pre-Calculus

In Pre-Calculus, students develop a deeper understanding of functions and their graphs. The function types covered in depth in this course include polynomial, rational, exponential, logarithmic, and trigonometric. Topics covered in relation to polynomial and rational functions include complex numbers, zeros of polynomial functions, and synthetic division. Some exponential and logarithmic topics discussed are change of base formulas, properties of logs, growth and decay, and logistic growth models. The second half of the course introduces trigonometry topics such as identities, trigonometric equation solving, half-angle and double-angle formulas, the law of sines, and the law of cosines. Students solve linear equations and inequalities in two and three variables using graphing and algebraic techniques (i.e. substitution, row-echelon, and Gaussian elimination). Infinite series, partial sums of series, and geometric series are introduced and limits are studied. Statistical concepts include probability, the counting principle, and the Binomial Theorem. The course concludes with an in-depth study of conics (i.e. parabolas, hyperbolas, and ellipses).

Pre-Requisites: Pre-Algebra; Algebra I; Geometry; Algebra II

Calculus

Students in this course will study the calculus of a single variable. It is a rigorous mathematics course that builds on the student’s understanding of polynomial, trigonometric, exponential, and logarithmic functions. These functions are studied intensely through an investigation of limits, derivatives, and integration. Emphasis is placed on real world applications that utilize a numerical, graphical, and analytical approach.

Pre-Requisites: Pre-Algebra; Algebra I; Geometry; Algebra II; Pre-Calculus

Delivery Mode
VC; BC
Credit
VC: 1.0
BC: 1.0
NCAA Approved

Delivery Mode
VC; BC
Credit
VC: 1.0
BC: 1.0
NCAA Approved

Delivery Mode
VC
Credit
VC: 1.0
NCAA Approved

Delivery Mode
VC; BC
Credit
VC: 1.0
BC: 1.0
NCAA Approved

Delivery Mode
VC
Credit
VC: 1.0
NCAA Approved
**AP Calculus AB**

AP Calculus AB is an Advanced Placement course designed to teach a college level calculus class over a full high school academic year by teaching a balanced approach to problem solving using analytical, algebraic, numerical, graphical, and verbal/written methods of representing problems. Students will review a variety of functions and their derivatives. In addition, students will learn how to apply the chain rule and implicit differentiation. The Mean Value Theorem and the Fundamental Theorem of Calculus will be studied in depth. The course concludes with the application of definitive integrals. This course will prepare students to take the AP Calculus AB exam. **Pre-Requisites:** Pre-Algebra; Algebra I; Geometry; Algebra II; Pre-Calculus; 'A' letter grade recommended in all previous mathematics courses

**AP Calculus BC**

AP Calculus BC is an Advanced Placement course designed to teach a college level calculus class over a full high school academic year by teaching a balanced approach to problem solving using analytical, algebraic, numerical, graphical, and verbal/written methods of representing problems. Students will review a variety of functions and their derivatives. In addition, students will learn how to apply the chain rule and implicit differentiation. The Mean Value Theorem and the Fundamental Theorem of Calculus will be studied in depth. Students will continue on in the course to study limits, in indeterminate forms, L'Hôpital's Rule, growth rates of functions, and indefinite integrals. A variety of sequences and series, polynomials of infinite degree, and their derivatives and integrals will be examined. Taylor series and Maclaurin series, as well as tests for convergence and divergence will be covered. The course closes with parametric functions, vectors, and polar coordinates. This course will prepare students to take the AP Calculus BC exam. **Pre-Requisites:** Pre-Algebra; Algebra I; Geometry; Algebra II; Pre-Calculus; 'A' letter grade recommended in all previous mathematics courses

**Practical Mathematics**

In Practical Mathematics, students will learn valuable math concepts they will use in their daily lives. They will review addition, subtraction, multiplication, and division of whole numbers, decimals, fractions, and integers. This course will also teach students how to work with ratios, proportions, and percents. Math skills for business and consumers, the basics of statistics and measurement, and integers will be explored. There will be a focus on problems involving signed numbers and solving equations. In addition, basic geometric concepts including perimeter, area, volume, and circumference will be discussed. Throughout the course, word problems will relate concepts to practical solutions. **Pre-Requisites:** None

**Consumer Mathematics**

Consumer Mathematics shows students how math is used in everyday life. The course instructs students to calculate earnings from a job, shop for and work with food, buy clothing, manage a household, buy and maintain a car, and help students understand interest rates and car insurance premiums. Basic mathematical skills, including dividing, multiplying, adding and subtracting integers, working with one-step equations, and percentages are all reinforced. Additional topics include home improvement costs, travel expenses, budgets, taxes, banking, and investing. Consumer Mathematics teaches problem solving strategies and alternate methods of computation to solve a wide range of consumer problems. **Pre-Requisites:** Pre-Algebra

**Business Mathematics**

In Business Mathematics, students will explore a variety of basic mathematical concepts, including algebraic equations, formulas, and operations using fractions, decimals, and percents. This course will show students how to work with percents to solve application problems and how to understand the mean, median, and mode of a distribution of data. Students will learn to implement real-world applications to solve business math problems, such as those related to banking services, payroll, taxes, and insurance. Students will develop an understanding of buying, markups, selling prices, markdowns, and inventory. In addition, students will learn about simple interest, compound interest, annuities, and loans, while also gaining knowledge of depreciation, stocks, and bonds. Practice problems will promote proficiency in dealing with everyday mathematical transactions. **Pre-Requisites:** Pre-Algebra
**Science**
Three credits in Science, including Biology, are required for graduation.

**Biology**
Biology covers a wide range of concepts in the field of biology and its four unifying themes. Students will review the scientific method and how it is used in Biology. Students will also discover how various topics of chemistry are incorporated into the field of biology. In addition, students will learn about the cell, including cell structure and function, how cells receive their energy, and how cells grow and divide. Students will enhance their understanding of cells by exploring the concept of genetics. In this part of the course, students will discuss the process of meiosis, Mendelian genetics, and how humans inherit traits. Later topics of exploration include the theory of evolution, including early ideas, how populations evolve, and the history of life on Earth. Students will also discuss the concept of ecology by examining different principles of ecology, interactions that occur within ecosystems, the biosphere, and how humans have affected ecosystems thus far. In addition, the concepts of classification and diversity of organisms will be covered, along with the Linnaean classification system and more modern types of classification. Students will also examine each domain and kingdom, and will then analyze each of the six kingdoms in further detail. Upon completion of this course, students will be required to take the Keystone Biology exam.

**Pre-Requisites:** None

**AP Biology**
Advanced Placement (AP) Biology serves as an equivalent to a two-semester introductory college biology course. Students enrolling in this course must have taken Biology in a previous school year; it is not a first year Biology course. Students taking this course may be eligible for college credit upon successful completion of the course and a sufficient score on the AP Biology exam administered by the College Board. This course differs from a traditional high school biology course by the textbooks used, the range and depth of topics covered, laboratory work, and the time and effort required by students. This AP Biology course is structured to the four Big Ideas in Biology as set forth by the College Board. These four Big Ideas include Evolution, Cellular Processes: Energy and Communication, Genetics and Information Transfer, and Interactions. Students will understand how the process of evolution drives the diversity and unity of life. Biological systems that utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis will be examined. Students will develop an understanding of how living systems store, retrieve, transmit, and respond to information essential to life processes. Finally, students will be able to describe how biological systems interact, and these systems and their interactions possess complex properties.

**Pre-Requisites:** Physical Science; Biology; one of the following: Physics, Chemistry, or Environmental Science; 'B' letter grade or higher in all previous science courses.

**Bioinformatics**
Bioinformatics was developed by Better Educators of Science for Tomorrow (B.E.S.T.) of the Pittsburgh Supercomputing Center at Carnegie Mellon University. Students will discover how concepts from math, biology, and chemistry are applied to the functions of DNA, RNA, and protein production and function. In addition, students will learn how to make use of the data generated by the Human Genome Project. Students will learn how to search and compare genetic data from different organisms utilizing several DNA and protein identification programs currently being used in medical, forensic, agricultural, and other life science research. The goal of this class is to introduce students interested in pursuing a degree in life sciences to possible career fields that are just beginning to evolve.

**Pre-Requisites:** Algebra I; Biology; Chemistry
Earth Science

This course covers many aspects of Earth science, including the nature of scientific investigation, Earth’s matter and composition, Earth’s chemistry, the history of the Earth, and the dynamics of Earth’s changing surface. Early concepts introduced include topics such as Earth’s revolution and rotation, as well as the advantages and disadvantages of various renewable and nonrenewable resources. Students will explore rocks and minerals, plate tectonics, volcanoes, earthquakes, weathering, and erosion. The second half of the course investigates freshwater systems on the Earth, the Earth’s atmosphere, oceanography, and astronomy. Students will examine the Earth’s river systems, groundwater, and glaciers. Then, students will explore Earth’s atmosphere, including its composition, movement of heat, compounds, and water vapor. Students will compare the formation of various types of clouds and patterns of air circulation, while also examining the Earth’s weather by identifying air masses, fronts, and storms. In studying oceanography, students will explore the Earth’s oceans, the properties of salinity, the composition of the ocean floor, and the features of currents and tides. Finally, students will study astronomy by exploring the moon, sun, and solar system, as well as distant stars and galaxies. Pre-Requisites: None

Fundamentals of Ecology

Fundamentals of Ecology explores the basic concepts of ecology. Students will investigate the many different systems in the environment that make up the world around us. Habitats, biomes, and energy resources are among the topics of discussion. Current case studies and online activities are used to bring the subject matter to life. Fundamentals of Ecology will touch upon ways that humans can influence the environment, which makes it a great precursor to an Environmental Science course. Pre-Requisites: None

Environmental Science

Environmental Science will introduce students to the scientific method, terrestrial and aquatic ecosystems, biomes of the world, trophic interactions, and nutrient and chemical cycles. Students will discuss the various forms of energy, including both renewable and nonrenewable resources. Students will learn ways in which humans can use the land, and will also explore the impact humans have on the environment. Current events and topics related to today’s environment will also be discussed. Ways in which humans can reduce negative environmental consequences will also be explored. Pre-Requisites: None

Physical Science

Physical Science will introduce two areas of study — chemistry and physics. The first half of the course introduces students to the study of chemistry. Throughout their studies, students will investigate topics surrounding matter, atomic structure, bonds, chemical reactions, and the periodic table. The second half of this course entails a concentration on physics. Students will investigate topics involving motion, forces, energy, waves, and electricity. Pre-Requisites: Pre-Algebra

Chemistry

Chemistry explores many aspects within the subject of chemistry. Students will begin by investigating matter, atomic structure, and the periodic table. The role of electrons with respect to ionic, metallic, and covalent bonding is then explored. Students will also demonstrate the ability to name and to write formulas for ionic compounds, molecular compounds, and acids and bases. Mole-mass relationships and mole-volume relationships will be analyzed. In the second half of Chemistry, students investigate subjects such as chemical reaction, stoichiometry, and the different states of matter. The behavior of gases, aqueous systems, and solutions will then be explored. Students will continue their study of chemistry by focusing on thermochemistry, reaction rates, and equilibrium. Finally, students will analyze acid and base theories, as well as oxidation-reduction reactions. In addition to virtual experiences, the lessons in this course will provide students with hands-on lab experience through various inquiry activities and mini-labs that can easily be performed in the home. These experiences encourage skills necessary for critical thinking. Pre-Requisites: Biology; Pre-Algebra; Algebra I

Delivery Mode
VC: BC
Credit
VC: 1.0
BC: 1.0
NCAA Approved

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**Introduction to Physics**

Introduction to Physics introduces students to algebra-based physics. Students begin by learning the fundamentals of the subject, including topics such as units and basic problem solving. The course covers concepts such as mass, acceleration, velocity, motion, forces, and machines. Students are then introduced to Newton’s Laws of Motion and will apply them to a variety of situations. This course incorporates the energy perspective into the study of motion, introducing students to the important concepts of work, energy, and power. The discussion includes potential energy, the concepts of linear momentum, and impulse. Moving further into the course, students continue to explore physics through the study of gravity, projectile motion, and Kepler’s Laws of Planetary Motion. The nature of matter and atomic structure will be studied, and students learn how the laws of physics apply on an atomic level. Students are introduced to thermodynamics, mechanical and electromagnetic waves, and the Doppler Effect. The course finishes with a look at electricity, magnetism, and optics, including a study of mirrors and lenses. **Pre-Requisites:** Pre-Algebra; Algebra I

**Physics**

In this course, students will cover topics related to algebraic analysis of classical mechanics including vectors, one- and two-dimensional kinematics, Newton’s laws of motion, energy, work, power, momentum, waves, optics and electricity. Students will investigate and find solutions to problems involving these topics. There will also be online labs, simulations, and animations completed through the course textbooks. **Pre-Requisites:** Pre-Algebra; Algebra I; Algebra II

**Astronomy**

Students will begin Astronomy by taking an in-depth look into the night sky. Students will learn about the stars, constellations, and phases of the Moon. The course will then discuss the cycles of the Sun, which influence the Earth’s climate. Students will become familiar with the origin of modern day astronomy as they learn about modern methods of measurement and observation, ground-based and space-based astronomy, and ancient instruments and techniques for observation. There will be concentration on solar activity, classification of stars, star formation, and the death of a star. The second half of Astronomy takes a step outside planet Earth and takes an in-depth look at the discovery and exploration of the Milky Way galaxy. Students will analyze the Big Bang theory and evidence that supports the creation of our solar system. Students will then explore the creation and properties of terrestrial and gaseous planets, recognizing what makes each planet unique. Lastly, students will explore foreign bodies of the solar system, such as meteors, asteroids, comets, and asteroid and comet impacts. **Pre-Requisites:** None

**Cutting Edge Science**

This course explores four popular topics in the biological sciences: epidemiology, forensics, sports medicine, and stem cell research. Students will learn about new trends in research and technology in these areas, and how each of these fields impact their everyday life. The epidemiology portion will explore health and disease within a population, with students learning how to utilize data to solve real world issues. Forensics will offer students the opportunity to utilize analytical science, biology, and anatomy to discover how crime scene investigations work. In sports medicine, students will learn about anatomy of the human body, injury prevention, and rehabilitation of an injury. Finally, in stem cell research, different types of stem cells, modern research methods, and alternatives to stem cells will be investigated. **Pre-Requisites:** Biology

**CES: Biotechnology**

This study of biotechnology is divided into two units. The first section provides background on the basics of biotechnology and includes its historical context, laboratory equipment, techniques, and safety criteria, and gives a comparison between research and production laboratories. The unit concludes with a review of basic chemistry and comparative cellular and molecular biology concepts. The second section presents more advanced topics and the current application of biotechnology. These topics include the structure and functions of proteins, genetic sequencing, polymerase chain reactions, genetic transformation, and the use of antibodies in biotechnology. The second unit culminates by introducing professionalism and a sample of the careers available in the field of biotechnology. **Pre-Requisites:** Biology
**CES: Epidemiology**

Epidemiology is the study of health and disease within a population. In this two-unit course, students will look at different ways to collect and analyze data and explore how to best communicate results. Starting with the example of Dr. John Snow and the cholera outbreak in the 1800s, students will look at a number of case studies surrounding disease control and apply them to the population's current health status. There will also be a concentration on the different types of data used in epidemiology. The course will discuss the use of this data to determine the health of a population. The final step will be to determine the possible need for public policies and to establish a goal to improve the health status within a population. **Pre-Requisites:** Biology

**CES: Forensic Science**

Forensic Science, a two-unit course, will introduce students to the fascinating worlds of crime scene investigation and laboratory science. Students will learn the fundamental procedures involved in investigating and processing forensic evidence. They will explore historic and theoretical crime scenes and apply the procedural methods required for examination, collection, and documentation of evidence. They will also explore the forensics lab to learn about testing methods, equipment, safety measures, and results interpretation. Additionally, students will explore the various fields and careers in forensic science. **Pre-Requisites:** Biology

**CES: Sports Medicine**

This two-unit course is an introduction to sports medicine that will provide students with basic knowledge about the field of sports medicine, the anatomy of the body, and common injuries that occur in sports. The first half of the course deals with the anatomy of the body and techniques used in sports medicine to train and strengthen the body. The second half helps students better understand how injuries occur and what treatment options are available. **Pre-Requisites:** Biology

**CES: Stem Cell Research**

Stem Cell Research, a two-unit course, will introduce students to the fascinating world of stem cells. Students will learn the basic terminology used in this field. The course discusses the different types of stem cells, as well as the controversies surrounding the use of human embryonic stem cells. Additionally, the course will examine possibilities that may be in store for the treatment of disease using stem cell therapy. The first unit emphasizes the impact of modern research methods and resources on stem cell research and explores some challenges that still exist in the field. Students will learn the advantages, disadvantages, and limitations of stem cell research. This section concludes with an examination of the possible alternate sources of stem cells. The second unit examines the applications and the roles of stem cell research, particularly in the topics of leukemia, spinal cord injuries, Alzheimer’s disease, cord blood, and drug testing. The course culminates with the investigation of the accuracy, validity, and reliability of scientific research and claims. **Pre-Requisites:** Biology

**CES: Emerging Genetics**

The first portion of this two-unit course provides students with the basic knowledge necessary to understand genetics and its applications. The introduction offers early discoveries in genetics, such as the contributions of Charles Darwin, Alfred Wallace, and Gregor Mendel. Students will conceptualize and apply Mendelian genetics and advance through the timeline of this field to study the great contributions of James Watson, Francis Crick, Rosalind Franklin, and Maurice Wilkins. With the structure of DNA covered in detail, students will apply this structure to its unique and complex function with the realm of the central dogma and mutations brought to light. The second portion of this course provides students with the basic skills needed to understand molecular genetics and its application to today’s society. The introduction consists of learning about techniques such as cloning and hybridization. Gaining an understanding of these techniques will allow the learner to see how they are applied to such areas as GMOs, animal development, cancer studies, DNA fingerprinting, and pharmacogenomics. Throughout this portion, the importance of population genetics and the theory of nature versus nurture will also be stressed. **Pre-Requisites:** Biology
**CES: Introduction to Engineering**

Introduction to Engineering provides an overview of the field of engineering and the primary processes and procedures used by engineers. Engineers play a central role in developing products and systems that improve our everyday lives, in areas such as transportation, computing, and medicine. In this course, students will explore each step of the product development cycle, from modeling and prototyping through production. Students will discover the interdependencies between the fields of engineering, science, and technology, and will explore engineering careers that suit their personal interests and abilities. Finally, students will examine the ethical and societal effects of engineering, which play a key role in the development of all engineered products and systems. **Pre-Requisites:** Pre-Algebra; Algebra I; Geometry; Physical Science

**CES: Applied Engineering**

Applied Engineering will explore core concepts and practical applications of various engineering fields. The beginning of the course focuses on electrical engineering as it explores energy science, electrical and electronic components, and devices and systems with digital labs to reinforce comprehension. Then, mechanical engineering as it relates to materials science and the physical dynamics of mechanical systems with case studies to support understanding is the next focus. In addition, software and computer engineering is explored, with emphasis on computer languages and coding, networks, and hardware components and systems. The course closes with material on aerospace engineering as it demonstrates multidisciplinary application of the other engineering fields. **Pre-Requisites:** Pre-Algebra; Algebra I; Geometry; Physical Science; Introduction to Engineering

**CES: Critical and Creative Thinking**

In this course, students will explore how and why we think critically and creatively and how engineers, scientists, and professionals in other technical careers benefit from developing these skills. Through this course, students will explore and develop their own critical and creative thinking processes as well as engage in their own inquiry, investigation, and discovery. While the course supports the School of Engineering track, it explores a wide range of topics including self-awareness, attitudes and beliefs, and system (holistic) thinking. **Pre-Requisites:** Pre-Algebra; Algebra I; Geometry; Physical Science; Introduction to Engineering

**Social Studies**

Four credits in Social Studies are required for graduation.

**American Explorations**

Students will explore four important parts of United States history in depth. Students will examine the Civil War, World War I, World War II, and the Civil Rights Movement. Each subject will be covered for a nine-week period. Students will be introduced to key events by reading original stories, biographies, classic literature, and primary source documents. The class will use letters, speeches, interviews, song lyrics, photographs, cartoons, and essays by historians to make these time periods come alive. Students will participate in class discussions, design projects, and give class presentations. **Pre-Requisites:** None

**American History**

American History is designed to help students understand and interpret the history of the United States, and understand the vast scope of complex issues throughout American history. Students will learn about prominent national events as well as historical milestones around the world. The course begins by examining the rise of modern America due to the effects of industrialization. Some of the topics that will be examined are the Progressive Era, American Imperialism, World War I, and The Great Depression. The second half of the year is a study of American History since World War II, and moves through time to the Cold War, the Civil Rights Movement, the Vietnam War, the Post-Vietnam Era, ending with the present. **Pre-Requisites:** None
AP United States History

Advanced Placement United States history will provide students with a complete and thorough understanding of the ‘full circle’ nature of American History. By design, American History is inherently a story of cause and effect. The course will be intense, demanding, and ultimately satisfying but there will be a heavy reading and writing expectation. Students are expected to be involved in the learning process and committed to putting forth their best effort. This entails reading and writing on a daily basis, in class, as well as independently. Students should expect between 45 minutes to an hour of homework every night. American History will be approached in a multifaceted method. Students will explore concepts in an analytical manner and emphasis will be placed on achieving a ‘true transfer of knowledge’. There will be extensive use of technology throughout the class when it assists in the development and understanding of the concepts of American History. A student may place out of an introductory college history course based upon completion of the course and a satisfactory score on the AP United States History exam. 

Pre-Requisites: ‘B’ letter grade or higher in all previous social studies courses

African American History

African American History is a survey course that spans the history of America. Students will begin by learning about ancient African society and culture. Their studies will take them through history to the presidency of Barack Obama. Students will explore African traditions as they were passed down from generation to generation. Students will examine the brutal institution of slavery and through primary source readings, will follow the history of slavery through the American Civil War. Other topics include reconstruction, Jim Crow laws, and the Civil Rights Movement. Students will comprehend the long struggle African Americans have endured to secure their constitutional rights. The goal of this course is to show the powerful and influential role of African Americans in US History. Pre-Requisites: None

Pennsylvania History

Pennsylvania History will broaden the student’s view of the state of Pennsylvania. The course will uncover the different regions, water forms, resources, and inhabitants of Pennsylvania. It will also discuss how Pennsylvanians have many different cultures and religions. This course will take the student back to the days of the early settlers of Pennsylvania and will move through time to discuss contemporary Pennsylvanians, including their economics, values, religions, and government. Pre-Requisites: None

1960s America

Have you ever wondered what life was like in the 1960s? This course allows students to experience the time in which their grandparents lived. It will cover the social, political, and cultural movements and changes that occurred during the decade. Some of the topics explored within this course include the transition from the Happy Days to the Radical Movement, the Vietnam War, and civil rights. The course also focuses on significant headlines of the 1960s that include the assassinations of Robert Kennedy, President John F. Kennedy, and Dr. Martin Luther King, Jr., as well as the Space Race, music of the 1960s, and effects of pop culture. In addition, students will be able to apply and further what they have learned by interviewing neighbors and relatives who lived through the examined time period and events. Pre-Requisites: None

Civics

Civics introduces students to the foundation of the democratic government of the United States and investigates the basic principles of this system. The structure of the legislative, executive, and judicial branches of the U.S. government are explored, and students determine how these branches work together. Students will also look at the characteristics of state and local governments throughout the country to examine the organization and responsibilities of these branches. Students analyze their own roles within government by identifying the rights of the citizen. The course continues on to explore the citizen’s role within society as a whole. A thorough investigation of the components of the American economy is conducted, including its foundations as well as how it interacts with other economies of the world. Finally, students will examine the United States in the context of world politics by studying foreign policy and the future of the U.S. in today’s world. Pre-Requisites: None
Tips for being a successful PA Cyber high school student.

- Attend each virtual, blended, or asynchronous class every day.
- Share with your parent or guardian the work that you complete each day.
- Keep close contact with your teachers and Academic Advisor.
- Complete all required reading, assignments, and homework each day.
- Follow the proper pacing for each of your courses.
- Attend all Keystone testing as required.
- Get involved with PA Cyber clubs and other activities.
Government
Government gives students a basic understanding of how the United States government works. The course introduces students to the American government by way of detailed discussions of the origins, functions, and various forms of government; the principles and foundations of democracy; the historical background of the U.S. government; and the rights and responsibilities afforded by the U.S. Constitution. Students review the three branches of the Federal Government. The various roles of Congress, which include the making of laws, Congress’s powers, and its sessions and terms are examined. Students explore the nomination and election processes, presidential powers, and the federal bureaucracy. Students will also learn about the judicial branch of the government, with discussions on the role of the courts, the national court system, and the Supreme Court and its appointment process. The second half of the year introduces the United States legal system and the role of police, courts, and the corrections system. Rights and freedoms including freedom of religion, freedom of speech and press, freedom of assembly and petition, and various interpretations of those rights will be analyzed. Students will then move on to learn about the U.S. political system, political parties, and political processes at the federal, state, and local levels. They will compare the political and economic systems of capitalism, socialism, and communism, and will analyze the role of the United States in international relations. Pre-Requisites: None

Economics
Basic economic theory and its effects on everyday life are the foundation of this course. Students will learn about basic economic features such as scarcity, opportunity cost, efficiency, and trade-offs, as well as the factors of production: land, labor, and capital. Students gain an understanding of the free market system as opposed to other economic systems. Considerable focus will be put on the laws of supply and demand. In addition, students will explore various types of market structures and the government’s involvement in these structures. The second half of the year provides the learner with an opportunity to explore the world of money, banking, and finance; understand how economic performance is measured; examine the ways that the government obtains and spends resources; and analyze international trade and economic development. Pre-Requisites: None

Cultural Explorations
Students will explore important and culturally significant time periods in World History. Each topic will be covered in depth for a nine-week period. Students will study Ancient Greece, Ancient Rome, The Ancient Americas (Maya, Aztec, and Inca), and The Middle Ages. Students will be introduced to the time periods by reading original historical fiction. Biographies, classic literature, and primary source documents will be used to highlight important people and events. Students will participate in class discussions, design projects, and give class presentations. Pre-Requisites: None

World Cultures
World Cultures explores the geography, history, and cultures of the world. During the course of the year, students will learn how the earliest civilizations developed in each region of the world and how these regions evolved up until the Age of Exploration and the Industrial Revolution. In each unit, students will study the major powers for each historical era. The course will begin with a discussion of the first river valley civilizations that developed in the Middle East, South Asia, East Asia, and North Africa and will focus on pre-history up to 200 B.C. The focus will then move to the Classical Era up to 700 A.D. and will be followed by the exploration of the major empires during the Middle Ages up to 1500 A.D. There will also be a study of the interaction between the different hemispheres up to 1800 A.D. As World Cultures progresses, students continue to examine the geography, history, and culture of the world beginning with the absolutist kings of the 1500s and ending with modern-day world culture. Europe’s absolutist kings, revolutionary movements, and the Age of Enlightenment are discussed. Next, students will turn their attention to the Industrial Revolution and to the European empire building in Africa and Asia. The course will then move to an examination of a world at war and will cover the Great War, nationalist movements in Russia and Asia, and World War II in addition to the Cold War, Third World independence, and struggles for democracy. The course will end by exploring current global issues such as terrorism, technology, and the global economy. Upon completion of this course, students will have gained a well-rounded, informed understanding of the world around them. Pre-Requisites: None
World Geography

World Geography introduces students to basic principles and tools of geography, which will be used to examine the world as a geographer. Students will explore the physical and human geographical aspects of the United States and Canada in order to analyze cultures based on their surroundings. From there, the geography of Latin America will be explored. This course will then take students on a journey across the Atlantic Ocean to survey the land and people of Europe. Russia and the Republics surrounding the country will be studied by detailing various geographical aspects of this land. The second half of the year surveys the physical and human geographic components of Africa. The focus then shifts to Southwest Asia and an exploration of its physical features, culture, resources, and current issues. World Geography concludes in Southeast Asia, Oceania, and Antarctica, where students will learn about the landscape and human impacts on these areas while noting contemporary problems facing these regions.

Pre-Requisites: None

Ancient History

Ancient History explores political, cultural, and economic themes that occurred from the beginnings of known history in ancient civilizations throughout Africa, the Americas, Asia, and Europe to the 1500s. Other topics discussed in the framework of Ancient History will be war, art, science and technology, religion and philosophy, and daily life through both individual narratives and collective experiences. These themes and topics will be considered to develop knowledge about the past and to relate ancient history to the development of the world today. Pre-Requisites: None

World History

World History covers the events, people, and places from the year 1500 A.D. to the contemporary world. Students will learn about world history by exploring its relevance, by studying living history, and by identifying the significance of a person, place, or event. The importance of understanding the role that geography plays in world history will also be studied. In this wide-ranging course, students will learn how the world and its inhabitants were shaped over time. Students will also study historical tools that will shape their thinking to foster an appreciation for the history they are living. History is only useful if we study the past to learn for the future. The second half of World History asks students to analyze the events, people, and places from the early 1900s to the modern day world. This course focuses on world events including World War I, the Great Depression and its effects on the world, and World War II. Post-World War II Asian successes and challenges are discussed in addition to Africa’s independence and challenges. Students will also learn about nationalism, war and peace in the Middle East, modern day Latin and South America, and the end of the Cold War. Pre-Requisites: None

Psychology

Psychology, the science that reflects people’s need to explain and control their behavior, will be explored in depth in this course, which includes extensive readings, various tests, research projects, and writing assignments. Topics will include physical, psychological, and personality development from birth to death, learning processes, and numerous – and often conflicting – theories on almost all subject areas.

Pre-Requisites: None

Sociology

Sociology is an introduction to the scientific study of a rich variety of sociological topics. Students will focus on the processes and components of concepts such as the meaning, agents, and function of culture and social structures, as well as the dynamics of social inequality and the functions and characteristics of social institutions. Throughout this course, students will use and develop reading, writing, discussion, research, and study skills. Tests, sociological projects, and research papers will evaluate each student’s performance.

Pre-Requisites: None
Introduction to Law

Introduction to Law will offer students the opportunity to explore all aspects of the United States legal system, from its fundamental ideas to its guiding principles. The emphasis throughout the course is examining the reasons why a society and its members must adhere to the legal system while thinking critically and evaluating tenets of the law. **Pre-Requisites:** None

Criminal and Consumer Law

Criminal and Consumer Law is designed to help students understand various laws that will touch their lives. The course covers the practical aspects of criminal and consumer laws, with an emphasis on individual rights. Students will gain important knowledge about the law, in general, and its role in protecting them as citizens and consumers. **Pre-Requisites:** Introduction to Law

Fine Arts

Two credits in Fine Arts are required for graduation.

Arts Alive

Arts Alive exposes students to various art forms, such as visual arts, music, literary arts, dance, theatre, media arts, filmmaking, and the different media and processes of making art. The course's lessons and activities increase students' awareness and appreciation of art. A majority of the activities involve reading and writing responses to summarize or present students' thoughts about particular artists or forms of art. Examples of some of the projects or activities include: compare and contrast essays about artists and their artwork, designing an illuminated letter, creating a poem, and playing interactive games on art websites. Additional examples of course activities include: planning a thematic dance performance, preparing to capture an important event on video, and explaining the stages of creating pottery. **Pre-Requisites:** None

Art History

Art History is an introductory art course that focuses on the art and architecture of the ancient Near East and Europe. The course begins with a brief overview of the fundamental methods of art; the meaning, purposes, and styles of art; the art elements and principles of design; and the various media used to create artwork. It then follows a chronological timeline. The timeline shows how art and world events have influenced each other from the prehistoric period to the early medieval era. There is a large focus on the art and architecture of Europe and North America. Particular emphasis centers on viewing works of art within their historical and cultural context so that students learn to understand how these key achievements relate to the past and present world. **Pre-Requisites:** None

Cinematic Review

Cinematic Review introduces students to the filmmaking process. The course explores the technology that makes a film, analyzing the filmmaking process from beginning to end, and builds an aesthetic appreciation of films. Various mainstream and art films will be discussed for their art, technology, and marketing success, or lack thereof. Students will develop a better appreciation of the movie-making process, learn how marketing can make or break a film, and discuss the ever-changing technology that can make anyone a filmmaker. **Pre-Requisites:** None

Drawing

This course spotlights drawing as a form of communication and introduces students to the elements and principles of art through hands-on activities. Students will sharpen their observation skills using a variety of art media, including graphite, charcoal, pastel, and collage materials. Through practice and experimentation, students will become adept at using basic drawing techniques and processes to depict the world around them, as well as to express their thoughts and feelings. In order to provide a comprehensive study of drawing, this course will analyze and interpret drawings created by others, introduce the concepts of aesthetics and art criticism, and explore the practical application of drawing in a variety of careers. Virtual field trips to art museums and artists' studios, as well as methods to build, organize, and maintain an artist's portfolio, are included in this course. **Pre-Requisites:** None
**Fashion Design**

Fashion Design is an advanced level course for students interested in learning the intricate process of how the fashion system works. This is an in-depth study of the fashion business in sequential order from concept to consumer. The fashion business is a series of buying supplies, creating and developing a new product, and marketing the product. The fashion business includes all the processes involved with producing raw materials, apparel, and accessories, and the retail stores that sell fashion merchandise to the public. It is important for executives in the fashion industry to know how all of these processes interrelate. Students will learn that the decision making process is complex and not just about the latest designers, styles, or trends of an era. Particular emphasis will be on planning, manufacturing, and marketing processes throughout history. **Pre-Requisites:** None

**Graphic Design**

Graphic Design provides students with a foundation in design basics and introduces students to the field of graphic design. The history of graphic design is explored, while students learn about famous graphic designers, see how the tools and technology used by designers have evolved, and discover how designers use the elements and principles of art and design to create successful pieces. The course introduces typography and demonstrates how to creatively use type. Students will also be shown how to work with different types of layouts, a grid system, and advanced design concepts, such as minimalism. The design process is investigated and utilized, which includes creativity, planning, visualizing, and constructing images through many different projects in which students create logos, business cards, letterheads, envelopes, mailers, flyers, posters, brochures, magazine layouts, and package designs. The course also covers concepts such as branding and advertising, while delving into the printing process, so that students can see how design projects are completed from start to finish. Finally, students will explore non-print design work, such as Web design and multimedia. Students will also look at various jobs in graphic design and explore the steps they can take, such as internships, networking, and creating a portfolio and résumé, to gain a successful career as a graphic designer. **Pre-Requisites:** None

**Introduction to Music Theory**

This course is recommended for students who plan to pursue music at a post-secondary level. Students will explore in-depth elements of music, from the essential building blocks to advanced analytical devices, which will help students sharpen their musical skills. This course will lead to a thorough understanding of music composition and theory. Concepts covered include melodic, rhythmic, and harmonic materials; musical structure and form; and composition and analysis. Students will develop a fundamental understanding of music notation and structures in music. Additional topics covered include techniques of music notation, musical acoustics and instrumentation, rhythm and meter, pitch collections and modes, intervals and tuning theory, melodic structure and types of musical texture, an introduction to counterpoint, and the structure and identification of chords. **Pre-Requisites:** Ability to read music

**Theatre**

Theatre will familiarize the student with the historical background of theatre, as well as the basic elements of acting. Learners will study stage lighting, sound, costume, and makeup. Students will learn to apply voice and gesture skills in pantomimed and improvised scenarios. The responsibilities of the producer and director of a theatre production will be discussed, in addition to the duties of the equipment and technical crews. The diversity of this course provides opportunities for the involvement of all students, regardless of experience and abilities. Theatre promotes unity, inquiry, and critical and constructive thought, as well as skills of comparison, problem-solving, interpretation, judgment, and research. Students are encouraged to investigate old and new ideas by exploring, discovering, creating, and clarifying their perceptions and knowledge. This course covers the art of character analysis and a variety of acting techniques, as well as the technical elements of theatre, such as sets, costumes, makeup, and special effects. **Pre-Requisites:** None
### The History and Development of Jazz

Jazz is a unique American art form considered by many to be among our nation’s most important cultural contributions to the world. This course examines the development of jazz, from the sounds of Dixieland, through bebop and modern jazz, to today’s popular fusions of traditional jazz with rock, hip-hop, and other emerging styles. Students will develop a full understanding of the trends, artists, and artistry that influenced the evolution of jazz, and gain a deeper appreciation of jazz’s unique and prominent position in the history of music. **Pre-Requisites:** None

### The Study of Contemporary Music

The Study of Contemporary Music introduces and explores the roots of contemporary American music. This course will focus on the social, technological, and artistic trends that helped create and shape music of the 1920s through present time. Learners will explore various genres and periods of music, including the early development of rock and role in the 1950s, the evolution of popular music, the British invasion of the 1960s, and the many ‘mutations’ of rock music in the 1970s. The second half of the course continues to explore the roots of contemporary American music. After completing this course, students will have gained a deeper understanding and appreciation for various forms of contemporary music, ranging from rock to jazz to country. Students will explore the history of each form and the role of music in the modern world. **Pre-Requisites:** None

### World Languages

3.5 credits in Elective are required for graduation. World Languages can count toward elective and/or fine arts credit.

#### Spanish I

Spanish I provides the student with a strong foundation of the Spanish language and its cultural influences. Lessons incorporate pronunciation, basic grammar, and practical vocabulary components to give the student a fundamental understanding of written and conversational Spanish. Lesson topics include Spanish pronunciation sounds, greetings and introductions, questions, and present tense verb conjugation. Students will also learn how to describe people, school, and pastime activities, in addition to likes and dislikes. In the second half of the course, students will learn to describe their families and express needs and desires when shopping or eating in a restaurant. Students will also learn irregular, present tense verb forms and common preterite tense verb forms. **Pre-Requisites:** None

#### Spanish II

Spanish II introduces complex grammatical components, such as reflexive verbs and the present progressive, preterite and imperfect tense forms, along with idiomatic expressions unique to the Spanish language. Lessons will provide themed sets of nouns, verbs, and adjectives that will be used to compose refined dialogue relating to everyday scenarios. Building on an ever-growing lexicon, the student will incorporate concepts to form questions, express preferences and possession, discuss the past, and describe and compare people, places, and locations. As Spanish II progresses, the imperative and subjunctive forms will be practiced, and the student will incorporate concepts to tell stories; describe people, places, and locations; form commands and give suggestions; ask questions and give directions; and express preferences, intentions, and opinions. **Pre-Requisites:** Spanish I

#### Spanish III

Spanish III allows students to acquire a more extensive topical vocabulary in the continued study of the language. Students will gain a higher understanding of complex grammatical structures, verb applications, and idiomatic expressions to increase reading and listening comprehension, as well as fluency in speaking and writing. Students will describe, analyze, summarize, and explain ideas verbally and in writing in the target language. Students will read excerpts from narratives, informational essays, Internet sites, and newspaper articles. They will then answer questions, use the dictionary, and analyze and summarize their readings. Students will practice and develop their reading comprehension and writing skills. **Pre-Requisites:** Spanish I; Spanish II
Spanish IV
This course will refine students' speaking, listening and writing skills, as well as extend their understanding of the Hispanic culture. Students will interact with various resources to continue to build knowledge and apply advanced grammar, syntax, and precise vocabulary to express themselves more accurately in a variety of contexts. Cross-cultural understanding is fostered and real-life applications are emphasized. Pre-Requisites: Spanish I; Spanish II; Spanish III

AP Spanish
Advanced Placement Spanish will develop students' listening, reading, speaking, and writing skills, as well as their understanding of Hispanic culture. Students will read and analyze authentic texts, including narratives, novel excerpts, modern articles, Internet resources, and documents concerning current events. Students will also listen to and respond to authentic recordings. Students will practice and apply advanced grammar and syntax, as well as precise vocabulary, to express themselves more accurately in a variety of contexts. This course will prepare students to take the AP Spanish exam. Pre-Requisites: Spanish I; Spanish II; Spanish III

French I
French I is an introductory course designed for learners who have little or no previous knowledge of the French language and French culture. As they progress through the course, learners will begin to acquire tools necessary for communication in the French language. They will interact with others, and also have the opportunity to present their ideas and interpret texts in French, using recordings, literature, and numerous other resources. This course will prime students' fluency in various communications with reasonable accuracy, such as the ability to greet others and exchange basic information about themselves, school, family, and preferences. They will also be able to describe people, things, and places, as well as talk about and write about daily activities using the present tense. Learners will gain a better understanding of other cultures by exploring the global Francophone community, and they will compare these different cultures to each other's and to their own. In addition to using the present tense to describe one's preferences and daily activities, learners will be able to present and exchange information using the passé composé and imparfait regarding topics such as travel and occupations. Pre-Requisites: None

French II
In French II, students will have the opportunity to review some of the structures from French I, but they will also build their knowledge of the French language and culture. Some of the structures that learners will review include the present tense of regular and irregular verbs, the passé composé with avoir and être, and adjective agreement and placement. Students will add to their knowledge foundation by employing direct and indirect object pronouns, reflexive verbs in the present tense, passé composé, and imperative mood. They will also learn vocabulary to talk about daily routines, celebrations, past events, and school. Additionally, students will explore the French cities of Paris and Rennes as well as the city of Quebec in Canada. They will also discover meals, sports, and crafts unique to the Francophone world. As French II progresses, students will use new vocabulary to discuss life in the country, outdoor activities, health, vacation, and books and films, students will be introduced to the imparfait and compare it to the passé composé. They will employ the future tense to talk about what will happen, and they will use the conditional and subjunctive moods to express hypothetical situations, necessity, and emotions. Students will be able to compare nouns using the comparative and the superlative. They will also explore the different cultural and culinary attractions of the Senegalese city of Dakar and the southern French city of Nice. Pre-Requisites: French I

French III
In French III, students will continue to explore the Francophone world, making stops in France, French-speaking Africa, and Francophone regions in the Americas. They will use new vocabulary to talk about school, communication, professions, and to discuss fairy tales and fables. Students will use new vocabulary to discuss outdoor activities, media, environment, travel, government, and the arts. Students will review the present tense, the past tenses (passé composé and imparfait), reflexive verbs, and the subjunctive mood as well as use the future perfect, the simple past, and the past conditional. As the course progresses, Students will apply the subjunctive mood in a variety of new contexts, as well as use the past subjunctive and the passive voice. Students will be exposed to a variety of literary texts that
This intermediate-advanced course is geared toward developing a higher level of fluency in French. Students will continue to explore the Francophone world, making stops in France, French-speaking and Francophone regions in Europe and in the Americas. They will use new vocabulary to talk about the news, natural phenomena, environmental issues, politics, government services, fine arts and traveling. Students will review the present, past, and future tenses along with the subjunctive mood. The student will also be able to use prepositions with infinitives, the passive voice, the comparative and superlative as well as the past subjunctive. French literature will play an important role in this course. Students will be exposed to a variety of literary texts that utilize the structures and vocabulary that they will be learning. An opportunity to apply these structures to various written and recorded projects will be applied throughout the course. Vocabulary, grammar, and culture in context through authentic literary and journalistic texts, will be examined over the course of the year. **Pre-Requisites:** French I; French II

### French IV

This intermediate-advanced course is geared toward developing a higher level of fluency in French. Students will continue to explore the Francophone world, making stops in France, French-speaking and Francophone regions in Europe and in the Americas. They will use new vocabulary to talk about the news, natural phenomena, environmental issues, politics, government services, fine arts and traveling. Students will review the present, past, and future tenses along with the subjunctive mood. The student will also be able to use prepositions with infinitives, the passive voice, the comparative and superlative as well as the past subjunctive. French literature will play an important role in this course. Students will be exposed to a variety of literary texts that utilize the structures and vocabulary that they will be learning. An opportunity to apply these structures to various written and recorded projects will be applied throughout the course. Vocabulary, grammar, and culture in context through authentic literary and journalistic texts, will be examined over the course of the year. **Pre-Requisites:** French I; French II; French III

### AP French

Advanced Placement French is designed for the student who already possesses comprehensive knowledge of the French language, as the course's instruction is entirely in French. Students must be generally conversant about Francophone cultures, and be able to apply the language in a variety of contexts and tenses. In Advanced French, students will explore issues within a Francophone framework including the use of information and communication technologies, the political dimension of language, the diversity of French-speaking cultures, global issues, and science and medicine, among others. Students will engage in the topics of the course through authentic written and audiovisual texts and will be expected to reflect on, analyze, and discuss the topics through written and speaking activities. Students will consider the notions of identity, family, community, and contemporary life in a Francophone context through literary and cinematic texts, newspaper and magazine readings, and audiovisual resources. Reviews of grammatical concepts, as well as vocabulary enrichment, are built into each lesson as they pertain to the units' topics and the tasks students are expected to accomplish. This course includes auditory comprehension assessments that require students to listen to audio files and to record themselves speaking. This course will prepare students to take the AP French exam. **Pre-Requisites:** French I; French II; French III

### German I

In German I, the student is given a comprehensive introduction to the basic and fundamental skills necessary for expressing common ideas in the German language. The course will begin by introducing the student to the basics of introductory conversation and will build in theme and scope to address topics including daily activities, travel, needs, desires, and preferences in increasingly complex and typical situations. This provides a realistic context for the skills acquired by the student. The course also provides a considerably thorough study of grammatical skills, ranging from the most basic sentences to engaging and creative structures dealing with more interesting situations. Along the way, the student will acquire a familiarity with many of the cultural factors that helped to shape and are shaped by the German language. As the course progresses, students will focus their study on the verb and gain a better understanding of its principal parts, versatility, and variety of tenses across the language. The student will be able to fluidly use verbs across many tenses discerningly upon completion of this course. The case system will also be extensively examined and implemented in an increasingly natural manner with nouns, verbs, and objects. A new case will be introduced to allow for more versatility when talking about possession, time, and dependence. Adjectives will be closely studied as well, with special attention paid to declension across all four cases in a variety of situations. Finally, more natural and practical vocabulary will be studied in this part of the course. There is a significant amount of vocabulary introduced throughout the course, which provides a rich lexicon for communicating a large number of ideas. Throughout the course, a great deal of attention is paid to all of the skills necessary for a full and practical mastery of the language, such as reading, writing, listening, and speaking. Despite its advanced level, this will allow the student to communicate a substantial range of topics, not only in contemporary Germany but also in Europe and in the rest of an interconnected world. **Pre-Requisites:** None
**German II**

In German II, the student will receive a comprehensive introduction to nouns and verbs, and previously learned concepts will be reviewed. The case system will also be extensively examined. A study of the verb will be the main focus in this part of the course. Lessons will concentrate on different types of verbs and their conjugations in different grammatical tenses such as present, future, past simple, and present perfect. One of the most challenging aspects of German grammar — verbs with accusative, dative, and genitive prepositions — will be practiced thoroughly. A large amount of new vocabulary and idioms dealing with sports, health, travel, jobs, and the workday will be acquired and practiced through a close study of situational dialogues in every lesson. The student will become familiar with many cultural and social aspects of German life. In the second half of the course, adjectives will be discussed with special focus on their use. All types of pronouns will be extensively examined, with special attention paid to problematic areas. This course will further elaborate upon the use of prepositions and conjunctions. Finally, the course will provide a deep understanding of subordinating clauses, one of the most challenging concepts in German grammar. A large amount of new vocabulary and idioms dealing with traveling, feelings, and German tradition will be acquired and practiced through a close study of situational dialogues in every lesson. **Pre-Requisites:** German I, German II

**Pre-Requisites:**
- German I
- German II

**German III**

The purpose of this course is to enable students to enhance proficiency in German through a linguistic, communicative, and cultural approach to language learning. There is continued emphasis on the development of listening, speaking, reading, and writing skills. Experiences with German literature are broadened. Cross-cultural understanding is fostered and real-life applications are emphasized throughout the course. **Pre-Requisites:** German I, German II, German III

**Pre-Requisites:**
- German I
- German II
- German III

**German IV**

The purpose of this intermediate-level course is to hone proficiency in German through a linguistic, communicative, and cultural approach to language learning. There is continued emphasis on the development of listening, speaking, reading, and writing skills. Experiences with German literature are broadened and several full-length German-language films will be screened and discussed. Cross-cultural understanding is fostered and real-life applications are emphasized throughout the course. **Pre-Requisites:** German I, German II, German III

**Pre-Requisites:**
- German I
- German II
- German III

**Latin I**

Latin I will introduce students to Latin through stories about the adventures of a typical Roman family. Students will read along while listening to the story, which will help them practice correct pronunciation. They will discover patterns by reading the stories and will practice applying these patterns through guided exercises. Excerpts about Roman life and the Roman world, as well as popular Roman myths, will give students a glimpse at the historical and cultural background of Rome and how it relates to our world today. As the course progresses, students will continue to read about the adventures of Cornelius and his family. Students will become familiar with more dative and ablative noun uses, as well as noun-adjective agreement. They will thoroughly review regular verbs, and they will learn future, perfect, pluperfect, and future perfect verb tenses and the forms of irregular verbs. Students will correctly use and translate various types of pronouns, and they will recognize 4th and 5th declension nouns. **Pre-Requisites:** None

**Pre-Requisites:**
- None

**Latin II**

In Latin II, students will read about Cornelius and his family’s adventures in Rome. Students will learn about clauses, passive verbs, present passive infinitives, and perfect passive participles. Adverbs and deponent verbs will be covered, as well as numbers, participles, and perfect active infinitive verbs. Students will continue to learn about Roman history throughout the chapters. In the second half of the course, students will continue learning more advanced aspects of Latin grammar. Students will be introduced to more adverbs, along with the irregular verbs “nolo,” “malo,” and “volo.” The structure of questions will be discussed, as will the more complex uses of the dative case. Students will continue to master previously learned material while building their Latin vocabularies and dissecting complex Latin sentences. **Pre-Requisites:** Latin I

**Pre-Requisites:**
- Latin I
Chinese I

Chinese I is an introductory course to Modern Standard Chinese – Mandarin as the spoken language and simplified characters as the written language. Students will also learn the basics of Pinyin for pronunciation purposes. This course introduces a beginner’s vocabulary of Chinese characters using scenario-based examples. Students will also get a glimpse of Chinese tradition and society through cultural tips. As the course progresses, students will continue to expand their vocabulary, using new words in both dialogue and writing assignments. Topics covered in the second half of the course include food, transportation, calling friends, date and time, the four seasons, holidays, and travel. Students will also build upon their grammatical skills while reviewing such concepts as aspect particles, adverbs of degree, and location. **Pre-Requisites:** None

Chinese II

Chinese II is a second-level course to Modern Standard Chinese — Mandarin as the spoken language and simplified characters as the written language. Students will review Chinese I content and continue learning Chinese vocabulary in Pinyin and Chinese characters. This course introduces an intermediate-level vocabulary and Chinese characters using scenario-based examples. Students will continue learning about Chinese tradition and society through social tips to become more familiar with Chinese language and culture. In the second half of the course, students will continue to expand their vocabulary, utilizing it in both dialogue and writing assignments. Most lessons in this course continue to introduce simple English-like Chinese grammar. Topics in Chinese II give unique insight into one of the fastest growing, largest economies in the world and give students conversational ability, listening comprehension, and a large volume of vocabulary. **Pre-Requisites:** Chinese I

Introduction to Conversational Italian

This course includes basic pronunciation, essential grammar and practical vocabulary, a brief introduction to Italian culture and history, and a detailed study of Italy’s geography with the help of maps and pictures of the most important cities, monuments, and landmarks. This course is also designed to enrich the vocabulary of students and refine pronunciation by means of dialogues in culturally appropriate contexts and specific situations drawn from daily life. Students will learn to conjugate some fundamental verbs and to pair them with their constantly increasing vocabulary. Immediate communicative practice is provided by combining elements of grammar with conversational opportunities and cultural information. Speaking and listening skills are developed with authentic role-play dialogues in meaningful contexts. **Pre-Requisites:** None

Advanced Conversational Italian

Students will continue to improve their listening and conversational skills through structured dialogues and role-play situations based on daily life contexts. Short stories will be used to enrich vocabulary, strengthen grammar structures, and learn new verbs. Dialogues and readings covering geographical facts, tourism, and travel around Italy will provide a useful, ready-to-use vocabulary for a great number of typical situations. Additionally, Italian art, history, culture, traditions, food, and other authentic materials will be used at various levels to provide contexts for practical listening and conversational practice. Articles and readings will help build a diversified vocabulary and enhance the student’s speaking abilities. **Pre-Requisites:** Introduction to Conversational Italian

Introduction to Conversational Arabic

This course introduces students to the Arabic alphabet, numbers, and fundamentals of the vocabulary and grammar of Modern Standard Arabic. Listening, speaking, reading, and writing are addressed. Interactive multimedia tools are used to develop skills in active listening and oral communication. Language learning is coordinated with exposure to Arab culture. This course is also designed to enrich the vocabulary of students and refine pronunciation by means of dialogues in culturally appropriate contexts and specific situations drawn from daily life. Students will learn to conjugate some fundamental verbs and to pair them with their constantly increasing vocabulary. **Pre-Requisites:** None
Advanced Conversational Arabic

Students will improve their listening and conversational skills through structured dialogues and role-play situations based on daily life contexts, continuing from Arabic I. Short stories will be used to enrich vocabulary, strengthen grammar structures, and learn new verbs. Dialogues and readings covering geographical facts, tourism, religion, and travel around Arab world will provide a useful, ready-to-use vocabulary for a great number of typical situations. Additionally, Arabic art, history, culture, traditions, food, and other authentic materials will be used at various levels to provide contexts for practical listening and conversational practice. Articles and readings will help build a diversified vocabulary and enhance the student’s speaking abilities. **Pre-Requisites:** Introduction to Conversational Arabic

Physical Education & Health

One credit in Physical Education and 0.5 credit in Health are required for graduation.

Health

From healthy lifestyles, diets, and exercise to responsibilities within individual families and larger communities, education within the health discipline is pertinent for all. Within this course, students will discover how to make the best decisions when attempting to improve their overall health. Each unit will cover topics that promote a safe, healthy, and active lifestyle. Some subjects that will be discussed throughout the course include the development of life skills; the basics of healthy, positive relationships; the necessity for stable mental health; stress management techniques; nutritional guidelines; and the value of exercise. Students will find this course to be both enjoyable and beneficial because it encompasses important topics that are applicable to their daily lives. **Pre-Requisites:** None

Personal Fitness

Personal Fitness teaches students to understand their lifestyles. It instructs students in methods to control their health through nutrition, exercise, and stress management. Students will discover that physical fitness means feeling good and looking good. This course will explore a variety of topics, such as stress, weight control, and nutrition. A cumulative project will allow students to design their own personal fitness programs. Physical activity is required to complete this course. **Pre-Requisites:** None

Physical Education 9 -12

Pennsylvania Public School Law requires all students to complete an annual course in physical education. In compliance with the law, the school requires students in grades 9-12 to complete 72 hours of organized, supervised physical activity each school year. Students will receive a physical education kit, which includes a workbook and items to complete different activities. Students are required to complete at least half of their physical education hours using the items they receive in the physical education kit. Students are also required to record their physical education hours in the PA Cyber Physical Education Log. **Pre-Requisites:** None

Road to Wellness

With increased public awareness concerning the importance of maintaining good health, there is no time like the present to learn about wellness. This course encompasses a variety of topics with a focus on nutrition and physical fitness. Subjects covered include basic nutrition principles, the digestive system, practicing nutrition, new dietary guidelines, label reading, and food safely. Other areas included are the foundation of physical fitness, exercise guidelines, and sports nutrition. This is an exciting and self-motivating course that will inspire students to take the road to wellness. **Pre-Requisites:** None
Business Electives
3.5 credits in Electives are required for graduation. Business, Multimedia, Technology, and General Electives can count toward these credits.

Introduction to Business
In this course, students will learn their roles as wage earners, consumers, and citizens as they explore the wide, exciting world of business. Course topics range from the extensive use of credit to the role of government in the United States economy. Students will be introduced to insurance, investments, communication, transportation, labor, world trade, and other issues vital to succeeding in today’s economy. Tips on career planning and job seeking promise to be especially helpful. Pre-Requisites: None

Money Management
Money Management will offer guidance in responsible money management skills. Topics covered in this course include various methods and approaches to saving and investing money for retirement, developing a sound budget, and eliminating debt. Students will also learn about several types of insurance, career planning, and the ins-and-outs of real estate and mortgages. This course is intended to provide a sound foundation for a lifetime of wise financial decision making. Pre-Requisites: None

Marketing and Advertising
Throughout this course, students will discover the various ways marketing and advertising touch their lives. Students will learn to identify customers’ desires and what is needed to create, advertise, and sell products to fit customers’ needs. This course will enable students to develop the skills they need as consumers and advertisers. It will also provide a solid foundation for those students contemplating careers in marketing, advertising, or other business related fields. Pre-Requisites: None

Entrepreneurship
Students enrolled in this course will learn about the fundamentals of planning and operating a business. Students will identify the personal attributes needed to be a successful entrepreneur and will have the opportunity to research various business models. The planning, organizing, directing, and controlling functions of operating a business will also be studied. Students will understand the responsibilities and risks involved in being in charge of an organization. Students will also use their creativity to create and develop a hypothetical business plan using the fundamental information they learned throughout the course. Pre-Requisites: None

Multimedia & Technology Electives
Microsoft Office Basics
Microsoft Office Basics will provide students with the skills necessary to operate Microsoft Word and PowerPoint. Students will learn how to use fundamental application features to complete personal, educational, and future job-related tasks. While learning Word, students will create and format business documents, such as letters and reports. They will learn to employ a variety of editing tools, such as cut and paste, and formatting styles, such as tabs, paragraph indentations, headers and footers, font styles and colors, and bullet points. Saving and retrieving documents, as well as using the spelling and grammar checks and inserting columns and tables, will be stressed throughout the course. While learning PowerPoint, students will create slides and presentations using the normal view, the sorter view, and the outline pane. Students also will explore formatting and proofing text, print options, inserting and manipulating objects, creating custom animations, and timing and rehearsal for presentations. Pre-Requisites: None
**Computer Aided Drawing and Design**

Computer Aided Drawing and Design will introduce students to the rationale for and basic concepts of technical drawing, including both technical drawing standards common in industry, and the use of CAD software to prepare technical drawings and drafts far more precise than any hand-drawn documents. Students will develop an understanding of the role technical drawings play in the design-development process and understand why they are considered the “universal language of industry.” They will learn specialized terminology, standardized methods for producing technical drawings, and the computer’s role in expediting the production, editing, storage, and transfer of technical drawings. Students will also learn how CAD is an essential function for smoother, easier business and design communication worldwide. Students will utilize CAD basic drawing principles while progressing through the course, and will compile technical drawings as the software takes the place of the pencil, paper, and drawing instruments. **Pre-Requisites:** None

**Interactive Game Design**

Do you have a passion for video and computer games? Would you like to learn how to design your own electronic games? Interactive Game Design is an introductory course for any student interested in learning about the creative design process behind electronic games. Students will learn how to create their own game ideas and how to develop those ideas into the full-fledged game design documents that game designers use in the real world. As student continue through the course, they will continue to learn how to design original and creative console and computer games. In this part of the course, students will learn how to properly design user interfaces, effectively use artificial intelligence, create deep characters and compelling stories, properly balance a game for fair play, and effectively market a game. This course will also offer students advice about getting jobs in the game industry, including résumé and portfolio tips, how to get noticed, and where to find contacts within the industry. **Pre-Requisites:** None

**Introduction to Web Design**

Introduction to Web Design combines learning from the fields of art, technology, and business to introduce students to an exciting and growing profession. The emphasis of this course is on design, not programming, although basic HTML is explored. Students will be introduced to leading-edge tools like Adobe Photoshop and Adobe Flash to understand how to design Web pages, as well as learn practical techniques for working both as a member of a Web design team and independently, all the while focusing on client interaction. **Pre-Requisites:** None

**Intermediate Web Design**

Intermediate Web Design is constructed to engage students in intermediate-level, Web-based design and development concepts. It will incorporate HTML, CSS, JavaScript, and information design, as well as instruction on image optimization and editing with Adobe Photoshop Elements. This course will also cover server/client architecture, proposal creation for projects involving “real world” clients and scenarios, and the full scope of the production process. In addition, students will learn how to create a fully functional website upon the completion of this course. **Pre-Requisites:** Introduction to Web Design

**General Electives**

**Career Explorations**

Students enrolled Career Explorations will investigate careers that match their strengths, interests, abilities, and values. Students will learn how to prepare for specific jobs and discover what additional training or preparation is needed for a future career path. They will acquire job-seeking skills such as resume-writing, interviewing, time management, and portfolio development. Learners in this course will develop effective communication skills and will generate an action plan for successful school to work transition. This course is designed to give students the tools they need to develop better workplace skills, handle career issues, money management, and balancing work and personal life. **Pre-Requisites:** None
College & Career Explorations
This course will familiarize students with the many options available to them after high school. Upon completion of this course, students will have acquired knowledge on planning for higher education, career planning, and managing finances. Specific topics in planning for higher education include applying for scholarships, loans, and grants; affording college; understanding the importance of the PSAT, SAT, and ACT exams, and learning about college fairs and college visits. While career planning, students will write a cover letter and resume, learn how to apply for a job, discuss tips for job interviews, the importance of job shadowing, and how to network with other professionals. Finally, students will also learn how to manage their own finances, including understanding savings and checking accounts, budgeting, taxes, and understanding loans. Pre-Requisites: One high school English course; Algebra I

Family and Consumer Science
Family and Consumer Sciences is designed to provide students with the basic information and skills needed to function effectively within the family and within a changing, complex society. Emphasis is given to the development of competencies related to family, career, and community leadership in America. This course will also include discussions pertaining to family and individual health, relationships, arrangement of personal living space, wardrobe planning and selection, and garment care and construction. Students will learn about child care while focusing on how to select toys and age-appropriate play activities for children; health and safety procedures; nutrition and food selection; and meal planning, preparation, and service. The section on home management will discuss money management; the use of credit and banking services; consumer education; computer use at home, in school, and in the workplace, and career skills. Upon completion of this course, students will have developed basic life skills that promote a positive influence on the quality of life. Pre-Requisites: None

Life Skills
Life Skills is designed to provide students with information they will need as they begin the next phase of their life; adulthood. Students will learn that, as an adult, they will leave much of their carefree life behind as they become more responsible for their own decisions. Throughout the course, students will have the opportunity to begin making some plans for what they want to accomplish in their lives. This course will guide students in figuring out who they are, including their personality, abilities, and interests. The second half of the course walks students through computer technology, social awareness, career planning, the employment setting, and the educational setting. These skills will help make the transition from high school to the next step smoother, whether students plan to go on to a job or a postsecondary school. Students will also learn the importance of living independently and how to take care of themselves and a home. Pre-Requisites: None

Pennsylvania Driver Education
This course helps Pennsylvania students develop a positive, mature, and knowledgeable approach toward driving. The course does not offer actual, behind-the-wheel instruction; however, it provides many outstanding tips on driving strategies and Pennsylvania traffic laws. Students will develop the thinking skills crucial to the development of safe driving. This course also qualifies for the 30 hours of classroom participation required by the Pennsylvania Department of Motor Vehicles before a learner’s permit can be issued. Upon successful completion of this course, students can request a certificate of completion from their instructor that may qualify them for discounted automobile insurance rates. Pre-Requisites: None

Sports Media and Broadcasting
Sports Media and Broadcasting is a hands-on course meant to prepare students who plan on majoring in broadcast journalism, communications, or any other form of media in college. In this course, students will explore the foundations of sports media, reporting techniques, and the current state of print journalism. In addition, students will become familiar with the technical side of broadcasting, the Internet’s role in sports media, photography, anchoring, play-by-play, and the economics of the industry. Following the semester timeline, students will be asked to complete in-the-field projects to enhance the skills required for a career in sports media. Pre-Requisites: None
Keystone Courses

Keystone I Algebra I

Keystone I Algebra I is designed to review math concepts that are covered on the Algebra I Keystone Exam. The Keystone Exams will assess students using both multiple-choice and constructed response questions. The content in the course was created to align with the Assessment Anchors as defined by the Eligible Content. Throughout this six-week course, an emphasis is placed on test preparation and preparing students to think critically. Through the use of daily lessons, students will have the chance to learn, understand, apply, and practice skills necessary for grasping content that will be assessed on the exam. This course will be a required part of the remediation process for students who were unable to score proficient or higher on their first attempt of the Algebra I Keystone Exam. **Pre-Requisites:** Algebra I

Keystone II Algebra I

This course is designed for students that were not successful in achieving proficiency on the Keystone Algebra I exam required for graduation. Keystone II Algebra I will provide students the necessary tools to improve their Algebra I Keystone exam score. Students will work on eligible content with a certified instructor. In addition, this course will provide students with test-taking strategies and will guide the student on a track to successfully fulfill graduation testing requirements. **Pre-Requisites:** Algebra I; Keystone I Algebra I

Keystone I Biology

Keystone I Biology is designed to review science concepts that are covered on the Biology Keystone Exam. The Keystone Exams will assess students using both multiple-choice and constructed response questions. The content in the course was created to align with the Assessment Anchors as defined by the Eligible Content. Throughout this six-week course, an emphasis is placed on test preparation and preparing students to think critically. Through the use of daily lessons, students will have the chance to learn, understand, apply, and practice skills necessary for grasping content that will be assessed on the exam. This course will be a required part of the remediation process for students who were unable to score proficient or higher on their first attempt of the Biology Keystone Exam. **Pre-Requisites:** Biology

Keystone II Biology

This course is designed for students that were not successful in achieving proficiency on the Keystone Biology exam required for graduation. Keystone II Biology will provide students the necessary tools to improve their Biology Keystone exam score. Students will work on eligible content with a certified instructor. In addition, this course will provide students with test-taking strategies and will guide the student on a track to successfully fulfill graduation testing requirements. **Pre-Requisites:** Biology; Keystone I Biology

Keystone I English Literature

Keystone I English Literature is designed to review language arts concepts that are covered on the English Literature Keystone Exam. The Keystone Exams will assess students using both multiple-choice and constructed response questions. The content in the course was created to align with the Assessment Anchors as defined by the Eligible Content. Throughout this six-week course, an emphasis is placed on test preparation and preparing students to think critically. Through the use of daily lessons, students will have the chance to learn, understand, apply, and practice skills necessary for grasping content that will be assessed on the exam. This course will be a required part of the remediation process for students who were unable to score proficient or higher on their first attempt of the English Literature Keystone Exam. **Pre-Requisites:** English 9; English 10

Keystone II English Literature

This course is designed for students that were not successful in achieving proficiency on the Keystone English Literature exam required for graduation. Keystone II English Literature will provide students the necessary tools to improve their English Literature Keystone exam score. Students will work on eligible content with a certified instructor. In addition, this course will provide students with test-taking strategies and will guide the student on a track to successfully fulfill graduation testing requirements. **Pre-Requisites:** English 9; English 10; Keystone I English Literature