The Learning Never Stops

Our Vision
Inspire today’s learners to be tomorrow’s thinkers.

Our Mission
Empower all students and families to become active participants in their own learning and equip them with skills for the future. We achieve this through engaging content, delivered by innovative teaching in a culture of caring.

About PA Cyber
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.
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Accreditations

Middle States Association of Colleges and Schools
In the fall of 2011, The Pennsylvania Cyber Charter School was initially 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. During the 2017-2018 school year, PA Cyber undertook the arduous task of reaccreditation. PA Cyber is an accredited member of the Middle States Association until the fall of 2025.

Earning accreditation from MSA means PA Cyber meets Middle 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
AdvancED is a trusted partner to more than 32,000 institutions in more than 70 countries serving over 20 million students. They are the world’s leader in providing improvement and accreditation services to education providers of all types in their pursuit of excellence in serving students. Accreditation is awarded to institutions that go through a rigorous internal and external review process demonstrating a willingness to be held accountable to the educational community for their commitment to high quality standards and student achievement. Accelerate Education and Lincoln Learning Solutions, two of PA Cyber’s curriculum providers, have achieved accreditation from AdvancED. AdvancED Accreditation is an internationally recognized sign of quality and accountability.

Accrediting Commission for Schools, Western Association of Schools and Colleges
Accelerate Education, one of PA Cyber’s curriculum providers, has earned accreditation from the Accrediting Commission for Schools, Western Association of Schools and Colleges (ACS WASC), a world-renowned accrediting association and one of the six regional accrediting agencies in the United States. The Accrediting Commission for Schools, WASC, extends its services to over 5,000 educational entities worldwide. Accreditation is integral to an organization’s perpetual cycle of assessment, planning, implementation, monitoring, and reassessment based upon student achievement. It fosters excellence in elementary, secondary, adult, and postsecondary education by encouraging school improvement through a process of continuing evaluation and to recognize, by accreditation, organizations that meet an acceptable level of quality in accordance with established criteria.

NCAA
The majority of PA Cyber’s core 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. NCAA approved courses are designated in individual course descriptions.
Curriculum Providers

Accelerate Education
Accelerate Education is a leading provider of digital curriculum for students in Kindergarten through 12th grade. Accelerate Education’s suite of products increases educational opportunities available for today’s learners and promotes student achievement through a flexible, individualized learning experience.

Accelerate Education’s online curriculum has been carefully designed to meet state and national standards. This curriculum challenges students academically through rigorous content, while also inspiring students to be active participants in the learning process. This is achieved by engaging students in a variety of activities and assessments appropriate to the field of study, such as labs, journals, written assignments, discussion activities, group and individual projects, formative assessments, authentic assessments, objective tests, and written exams. Students are required to apply skills in increasingly complex ways as they progress through their courses.

With a robust catalog of more than 300 course titles and 30,000 discrete learning objects, Accelerate Education is able to support K-12 online learning needs for core subject areas, electives, and world languages at all levels – from Credit Recovery to Advanced Placement.

Lincoln Learning Solutions
Lincoln Learning Solutions 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 Learning Solutions course offers students a variety of content supplemented with various activities that include web investigations, audio recordings, 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 Learning Solutions’ catalog of courses includes offerings beginning with early Kindergarten progressing through high school. These core courses include mathematics, English, science, and social studies, along with a variety of electives for various grade levels.

Lincoln Learning Solutions, 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.

Lincoln Park Performing Arts Center and ARTiFact: Content for Learning
A service of Lincoln Park Performing Arts Center, ARTiFact: Content for Learning creates, curates, and distributes digital educational resources to inspire, enhance, and extend learning in and through the creative and performing arts. ARTiFact's high school arts curriculum, ArtsAnywhere, provides high school students comprehensive offerings of courses in music, theater, dance, visual and media arts, career readiness, and STEAM. These courses feature expert instruction supported by engaging media, all guided by seasoned teachers who are also working artists.

ARTiFact: Content for Learning is also the developer of ArtsAlive!, an arts engagement curriculum for elementary and middle school students. ArtsAlive! is designed to raise awareness and promote understanding of the creative and performing arts, as well as to give learners the opportunity to create and perform their own works. All ARTiFact: Content for Learning courses are aligned to state and national standards.
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.

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 a credit recovery program for qualifying students. Our credit recovery courses provide students engaging content with supplemental activities. The credit recovery 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). Virtual classes are available to students in grades 2-12. The Virtual Classroom follows a traditional school year calendar, typically beginning in September and ending in June. Daily lessons include discussions, videos, and other activities. Homework will be assigned to reinforce the concepts presented in class. All Virtual Classroom courses are recorded and archived so students can review sessions as needed.

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 meeting days will vary. The scheduling of VC courses is flexible; however, student attendance is required. Together with your Academic Advisor, families can choose from a variety of class times in order to meet each student’s needs. Please check with your Academic Advisor for class meeting days and times for individual classes.

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

Blended Classroom (BC)

The Blended Classroom (BC) combines the best of the asynchronous setting with the addition of a live classroom experience one day per week. Blended Classroom courses are taught by Pennsylvania-certified teachers.

The Blended Classroom is an option for students in grades K-12. In grades K-4, students will be scheduled in a live class session once per week for all subjects. In grades 5-12, all core content area courses, including English language arts, mathematics, science, and social studies, will be offered individually in the Blended Classroom. These class sessions will include direct instruction, practice, discussion, videos, and other activities to help reinforce the content presented in the asynchronous material. Students will be required to maintain a steady pace in their coursework and attend their live class sessions as directed.

The Blended Classroom offers the flexibility of a self-paced course with live teacher support that will help all students be successful.
Asynchronous Classroom (AC)

The Asynchronous Classroom (AC) is available for certain elective 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 complete the work as posted in the course. Course components may 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 complete course work.

State Testing

PSSA Exams

The Pennsylvania System of School Assessment, or PSSA, is a measure of student proficiency in English Language Arts, Mathematics, and Science according to the Pennsylvania Core and Academic Standards. PSSA results allow PA Cyber teachers and administrators to assess student learning and achievement each year, while providing a snapshot of each student’s abilities. Students in grades 3-8 are required to take the English Language Arts and Mathematics PSSA exams. 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. 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. PA Cyber will provide two testing windows for students: one in December and one in May.

Students who do not score proficient or advanced on any Keystone Exam may be enrolled in a Keystone Course. These courses are designed to help students understand, practice, and master the concepts tested, and to review test-taking strategies. After completing a Keystone course, the student will be scheduled to retest during the next Keystone testing window. For questions regarding Keystone Exams, please contact your Academic Advisor.
Student Support & Services

PA Cyber Regional Offices

The Pennsylvania Cyber Charter School is committed to providing our students and families with multiple opportunities to engage deeply in their learning and to access the programs and services they need to be successful. In addition to our robust online offerings, PA Cyber has established regional office locations throughout Pennsylvania that offer resources and support for students and families. Our regional offices offer family and student-centered activities and services designed to enrich, enhance, and extend your learning experience.

For a complete list of activities and services offered, please contact the Regional Representative of the nearest regional office location or visit the Family Link and Regional Office tile in Buzz.

Allentown Regional Office
974 Marcon Blvd, Suite 200
Allentown, PA 18109

Erie Regional Office
1980 Edinboro Road
Erie, PA 16509

Greensburg Regional Office
1040 Towne Square Drive
Greensburg, PA 15601

Harrisburg Regional Office
479 Port View Drive, C-34
Harrisburg, PA 17111

Philadelphia Regional Office*
825 Baltimore Pike
Springfield, PA 19064
* Fall 2021 anticipated opening

Pittsburgh - South Side Regional Office
The Brix at 26
2600 East Carson Street
Pittsburgh, PA 15203

Pittsburgh - Warrendale Regional Office
200 Pinewood Lane, Suite 100
Warrendale, PA 15086

State College Regional Office
Creekside Plaza
1700 South Atherton Street
State College, PA 16801

Wilkes-Barre Regional Office
40 East Northampton Street
Wilkes-Barre, PA 18701

Say hello to Archie!

Named in honor of the ancient Greek mathematician, scientist and innovator Archimedes, Archie is the official mascot of the Pennsylvania Cyber Charter School, and is a symbol of our school’s commitment to the pursuit of knowledge and non-stop learning. Throughout the year, Archie soars across Pennsylvania, hoping to meet as many PA Cyber students and families as possible. You can meet up with Archie at one of our Family Link or other PA Cyber community events. When you do, make sure to take a photo with him, and share it with us on our Facebook page!
Student Support

English Language Development (ELD) Program

Formerly known as English as a Second Language (ESL), PA Cyber's English Language Development (ELD) program complies with Title 22, Chapter 4 of the Pennsylvania School Code. The Pennsylvania Department of Education requires every public school district and charter school to provide a Language Instruction Educational Program (LIEP) for each student who is identified as an English Learner (EL). Placement in an LIEP is guaranteed to all students who qualify. PA Cyber provides its ELs with stand-alone ELD instruction designed to develop proficiency in English listening, speaking, reading, and writing skills.

The goal of PA Cyber's ELD program is to facilitate the growth and development of social and academic language for multilingual learners. The ELD Department provides identification, placement, direct English language instruction, content classroom language support, state-required assessment, and monitoring for all identified ELs.

Additionally, the PA Cyber ELD Department provides the following for its enrolled EL students:

- Live English language instructional sessions with a Pennsylvania-certified ESL Program Specialist.
- Additional language support within the content classroom.
- Enhanced communication between staff and family in the family's preferred language.
- Individual virtual tutoring sessions with the option of translation.
- Supplemental, asynchronous online lessons and benchmark assessment providing targeted instruction and support.
- Progress monitoring of English language development.
- Participation in the state required ACCESS for ELLs® assessment.

Gifted and Talented Program

Following the Pennsylvania Department of Education’s Chapter 16 regulations, the PA Cyber 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 Gifted and Talented program affords the following for students that have been identified as gifted:

- Personalized approach to understand and best accommodate each gifted student’s educational needs.
- Engaging educational opportunities and programs designed for advanced learners.
- Live online enrichment courses.
- Online discussion forums and interactive student competitions.

School Counseling

The School Counseling Department at PA Cyber works with all students to ensure their potential is fully realized in regards to academic, personal, social, and career development in order to achieve success in and out of the classroom. Counselors offer support in a variety of ways including individual, group, and classroom guidance. Counselors prepare students for life after high school by advising and assisting in college, career, and post-secondary initiatives. School counselors collaborate with community agencies, staff members, parents, teachers and administrators to ensure that all students are empowered to create a quality life as they acquire knowledge, learn responsible behaviors, and prepare to become lifelong learners.
Student Assistance Program
The primary goal of the Commonwealth of Pennsylvania's Student Assistant Program (SAP) is to help students overcome barriers so they may achieve, remain in school, and advance. School personnel will help identify barriers including but not limited to, alcohol, tobacco, other drugs, social problems, family issues, teen parenting, mental health, and transitional housing. Each referral is reviewed by members of the SAP team. Intervention and recommendations are put into action, and support and follow up are offered to students. While SAP is a mandatory statewide program in public schools, the structure and operation of the program at PA Cyber is a unique expression of an integrated model utilizing a tailored approach to case management. In accordance with the McKinney-Vento Act, SAP works with families experiencing barriers to fixed and adequate housing. SAP also sponsors Youth and Teen Leadership events for all PA Cyber students throughout the school year. For more information on PA Cyber’s Student Assistance Program please visit the SAP Course Card in Buzz.

SAP is a larger part of the PA Network for Student Assistance and is administered by the Pennsylvania Department of Education through the PA Department of Education’s Office for Safe Schools, the PA Department of Drug and Alcohol Programs - Division of Prevention and Intervention, and the PA Department of Human Services - Office of Mental Health and Substance Abuse Services/Children’s Bureau.

Exact Path
Edmentum’s Exact Path adaptive diagnostic assessments focus on understanding the needs of every K-8 student by creating a comprehensive profile of their individual strengths and needs above, on, or below their grade level. These reliable assessments support personalized learning by providing teachers and families a valid measure of growth upon each successive administration. Students in grades 3-8 will complete a language arts, a reading, and a math diagnostic assessment twice per year. Students in grades K-2 will complete these assessments three times per year. In addition to the diagnostic assessments, students will routinely be engaged in their own personalized Learning Path during and outside of classroom instruction in order to obtain their individual growth goals.

Study Island
PA Cyber utilizes the Study Island benchmark to assess student proficiency of Pennsylvania Core and Academic Standards. Students in grades 3-8 will complete the Language Arts and Mathematics benchmark assessments twice per year with students in grades 4 and 8 also taking the Science benchmark assessment two times a year. Students taking English 10, Biology, and Algebra I will also take the respective Study Island benchmark assessment twice per year. In addition to the benchmark, students will routinely be engaged in online interactive games in order to prepare for the PSSA and Keystone Exams. Ahead of state testing, students are highly encouraged to complete all topics in each subject area for their grade level. The variety of activities, including games, flashcards, and videos, reinforce the skills necessary for academic success.

FEV Tutor
FEV Tutor offers PA Cyber students a range of virtual tutoring support from on-demand homework help, targeted remediation, and college entrance exam prep. Families are assisted by the FEV Tutor Academic Support Team to develop individualized learning plans to customize an online tutoring schedule that works for even the busiest of students.
**TutaPoint**
TutaPoint offers online homework help for students of all grade levels in math, science, language arts, social studies, and world languages. TutaPoint provides the expertise of a professional educator to help your child succeed.

**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 needs of each student, while helping them to realize success. Student progress is measured to ensure the effectiveness of the instruction they receive.

**IMPACT Tutoring**
IMPACT is a peer tutoring program in which a high achieving high school student in grades 10, 11, or 12 tutors an elementary or middle school student to prepare for the yearly PSSA exams. Each high school tutor works independently with a student in a private online classroom to increase academic and critical thinking skills. Each IMPACT tutoring session is supervised by a certified teacher in that subject area. Throughout the program, student progress is tracked and student strengths or areas of concern are shared with each student's family. IMPACT meets once a week online for ten weeks before the PSSA testing window. Peer tutoring not only increases academic performance and testing scores, but also helps increase student self-esteem and social interaction.

IMPACT tutoring sessions are available for students in grades 3, 4, 5, 6, 7, and 8 in English language arts and mathematics, while tutoring sessions for science are available to students in grades 4 and 8.

**PA Cyber Library**
The PA Cyber Library was created for students, parents, and staff for use in and out of the classroom. Resources such as e-books, read-aloud, and audiobooks are available through Sora, a collection of digital content, accessible from multiple devices. The PA Cyber Library includes access to Project Gutenberg and Khan Academy along with parent resources, physical books, and the PA Power Library, a database of library catalogs provided for all Pennsylvania residents.

**netTrekker**
netTrekker is an educational search engine that brings the best of the internet to K-12 students, connecting them to more than 400,000 hand-selected, educator-approved sites. netTrekker search results are organized by grade level bands and detail the readability of each web resource, so families can be confident that students are 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.

**Reading Rewards Program**
Developing a routine and fostering a love for reading is the key to your child’s success. Reading impacts your child’s language, literacy, and overall brain development. PA Cyber’s Reading Rewards Program encourages reading for enjoyment at all grade levels. Each month, families set personal goals of minutes, pages, or books read. Students who meet their personal reading goals each month receive incentive rewards.
Student Services and Activities

Family Link — Connect. Share. Support

PA Cyber’s Family Link is an outreach program that offers families the chance to connect through field trips and local parent-planned activities. These events broaden and enrich the cyber school experience by creating an important social network for PA Cyber students and their families. Students enjoy opportunities to spend time with classmates who share their interests, and parents are able to talk and share ideas with other parents who respect and understand their educational choice. Family Link members are also given opt-in access to a secure, online directory of other members’ names, PA Cyber email addresses, grade levels, and geographic regions. This unique directory helps families connect and communicate with others to foster support, enhance learning, and create lasting friendships.

ArtReach

The creative and performing arts are essential to a dynamic and fulfilling education. Study after study show the arts promote academic achievement and heighten cultural literacy, and also equip students with the skills so vital for success in the 21st century: critical thinking, creative problem solving, effective communication, and the ability to collaborate with others.

PA Cyber has teamed up with Lincoln Park Performing Arts Center to create ArtReach. ArtReach offers PA Cyber students access to in-person and virtual classes, workshops, virtual experiences, and performance opportunities. Taught by experienced and highly skilled professional artists, ArtReach allows students to broaden and deepen their knowledge of diverse art forms, cultivate their artistic talents, and socialize and collaborate with other PA Cyber students.

ArtReach classes are offered in 12-week class sessions during the fall and spring semesters at each of PA Cyber’s regional offices. For students who do not live near a PA Cyber regional office, or can’t get to a regional office in between academic classes, PA Cyber also offers Virtual ArtReach courses taught in the online classroom by Lincoln Park Performing Arts Center’s teaching artists. Virtual ArtReach classes are also offered in 12-week sessions during the fall and spring semesters.

STAR Academic Incentive Program

Exclusive to PA Cyber, the STAR program is an academic incentive program that allows students not identified as gifted learners access to similar opportunities through online enrichment courses and other supplemental programs. STAR students must meet specific academic and attendance criteria.

National Junior Honor Society

“More than just an honor roll” is the motto of the National Junior Honor Society. NJHS was established in 1929 to recognize outstanding middle school students for their character, merit, leadership, service, and citizenship. With over one million students participating in national honor societies across the nation, the PA Cyber chapter of the National Junior Honor Society joined the national organization in 2014. The PA Cyber chapter invites students in grades 6-9 who demonstrate the five core principles. Eligible students must maintain As and Bs in all classes, demonstrate leadership and citizenship within their school, community, and other extracurricular activities, as well as complete a set number of hours of community service. Members of the PA Cyber chapter are also required to attend monthly online meetings, submit monthly assignments, and complete a predetermined end-of-year service project. New candidates will attend a mandatory formal induction ceremony as required by NJHS guidelines. Ceremonies are held each year at locations in the western, central, and eastern regions of the Commonwealth. The PA Cyber chapter of the National Junior Honor Society welcomes you to become part of a once in a lifetime experience.
National Honor Society
The National Honor Society (NHS) is a national organization that consists of many chapters across the United States. The National Honor Society was founded in 1921 by the National Association of Secondary School Principals by Principal Edward S. Rynearson of Fifth Avenue High School in Pittsburgh, Pennsylvania. National Honor Society chapters are commonly active in community service activities both in the community and at the school. The PA Cyber NHS Chapter is open to students in grades 10-12 with a minimum grade point average of 3.5 or higher. Selection is based on four criteria: scholarship, leadership, service, and character. NHS requires service to the community, school, or other organizations. Members of the PA Cyber chapter are also required to attend monthly online meetings, submit monthly assignments, and complete a predetermined end-of-year service project. These projects meet the required monthly service projects. New candidates will attend a mandatory formal induction ceremony, as required by NHS guidelines. Ceremonies are held each year at locations in the western, central, and eastern regions of the Commonwealth.

Students Helping Students (SHS) Peer Mentoring
The mission of Students Helping Students is to help PA Cyber students improve interpersonal communication skills while increasing peer-to-peer interaction between students. SHS seeks to empower students personally and academically through positive peer involvement and extra in-school support. Students in grades 7-9 are eligible to be considered as mentors while students in grades 5-8 are eligible to be considered as mentees.
PA Cyber Clubs and Workshops

One of the easiest and quickest ways to meet other PA Cyber students is to join a club or workshop. At PA Cyber, these activities meet online through our online classroom, and stay connected by discussions and chats with fellow students in Buzz. Each club elects officers, chooses club topics to discuss, and may even help organize club outings.

No matter your interest, there is a club or workshop for you! Get involved, meet others, expand your horizons, and have fun!

Elementary School Clubs and Workshops (K-5)
- All Aboard Gamers Club (2-5)
- Archie’s Explorers Club (K-5)
- Around the World with Foreign Languages Club (K-5)
- Bible Adventurers (3-5)
- Bookworm Buddies Book Club (3-5)
- Coding I Workshop (K-2)
- Coding II Workshop (3-5)
- Coding III Workshop (3-5)
- Hands on Science Club (K-2)
- Hands on Science Club (3-5)
- Nature Club (K-5)
- Ready, Set, Go Club (K-2)
- Ready, Set, Go Club (3-5)
- Show and Tell Club (K-2)

Middle School Clubs and Workshops (6-8)
- Adventures in Reading Club
- American Sign Language Club
- Art Club
- Connect Jr. Bible Club
- Cooking Workshop
- Crochet Crazy Workshop
- DIY Agriculture Workshop
- French Club
- Game Creation & Design Workshop
- German Club
- Global Education Club
- Good Eats Club
- Italian Club
- It’s a String Thing Workshop
- Science Investigators Club
- Spanish Club

High School Clubs and Workshops
- American Sign Language Club
- Art Club
- Book of the Month Club
- Chess Club
- Circuits and Code Workshop
- Citizen Science Workshop
- Cooking Workshop
- Connect Bible Club
- Crochet Crazy Workshop
- Cyber Patriot
- Debate Club
- DECA
- Digital Fabrication: 3D Printing Workshop
- Digital Fabrication: Laser Cutting Workshop
- Dungeons & Dragons Club
- Equestrian Club
- Esports Club
- Express Your Voice Workshop
- French Club
- German Club
- Global Education Club
- GSA
- History Club
- Italian Club
- Literary Journal Club
- Maker Club
- Model United Nations Club
- Newspaper Club
- Origami Workshop
- Photography Club
- Project High Altitude Workshop
- Running Club
- Science Club
- Spanish Club
- Student Council
- The Grub Hub Cooking Club
- Young Ambassador Club
Early Kindergarten
The Early Kindergarten curriculum 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, Early Kindergarten 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 students to the alphabet and the world of literature. Students will be able to identify the letters of the alphabet, read and write their 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 their own name. In addition, students will practice their listening and comprehension skills, draw pictures to communicate ideas, and tell about personal experiences.
Kindergarten

Language Arts K

Language Arts K sets the stage for future success in reading and writing. Students will come to understand the basic concepts of print. They begin the year by practicing handwriting strokes and transition into writing all uppercase and lowercase letters of the alphabet. This course emphasizes phonics as the foundation to being able to read, and teaches students letters, letter sounds, and word families. Students will read and be exposed to a variety of fiction and nonfiction literature, and will practice identifying characters, main idea, plot, and setting. Each week, students will learn new sight words and master reading and comprehension strategies to grow as readers. This course features engaging videos, stories, songs, interactive games and activities.

Mathematics K

Mathematics K is an interactive class encouraging students to have fun with numbers and to find early success with mathematical concepts. In the first half of the year, students will learn foundational math facts. They will count to 12, compare sizes, use ordinal numbers, put items in order, use a number line, take basic measurements, and tell time on digital and analog clocks. In the second half of the year, students will practice counting and writing numbers to 50. Additional topics of exploration include comparing and sorting objects, basic geometric shapes, and coins and money. Students will have many opportunities to practice these mathematical concepts by engaging in interactive online games and activities and by completing hands-on offline activities.

Science K

In Science K, students will use their senses to explore the world. The course is centered around the four seasons and students experience nature walks, gardening, and imitative games to explore various concepts. Stories, videos, songs, and games will help young learners learn more about the world around them. Topics in this course include autumn weather and the changes trees go through in the fall, listening to and observing animals and nature, seeds and plants, animals and weather changes, the properties of matter, severe weather, and spring flowers.

Social Studies K

Social Studies K introduces students to their place in the community and the responsibilities of being a member of society. They will also learn about everyday heroes, the importance of rules, getting along with others, defining emotions, and life in the past. Students will also learn about their home state of Pennsylvania. Students will learn about United States symbols such as the American flag and the eagle. From there students learn about holidays and celebrations in the United States and around the world. In the second half of the year, students are introduced to map reading skills and will be taught to read maps of the United States and the world. Students will learn about needs and wants and buying locally. The course closes with a study of character education, focusing on topics such as loyalty, honesty, kindness, service, and forgiveness.
First Grade

Students in First Grade continue to build on the mathematics, reading, writing, social studies, science, and visual arts skills learned in Kindergarten by combining both online and offline components. Online each day, students watch four engaging videos featuring teachers Mr. Reed Moore, Mrs. Triggle, Ms. Mapple, 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 may be 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 everyday mathematical situations.

Reading 1

The goal of Reading 1 is to build an independent, lifelong reader. Phonics is 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. 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. Throughout the year, students will practice a variety of writing forms including writing alternate endings to stories, a book report, a personal narrative, a folktale, realistic fiction, letters, and poems. Students will enhance their writing by using vivid verbs, adjectives, and synonyms. Pre-writing skills, such as story maps and diagrams, will also be emphasized.
Second Grade

Students in Second Grade engage in daily lessons in math, reading, writing, social studies, science, and visual arts by combining both online and offline components. Online each day, students watch four engaging videos featuring teachers Mr. Reed Moore, Mrs. Triggle, Ms. Mapple, 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 for multiplication and 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, fairy tales, 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.
Third Grade

**Language Arts 3**

Language Arts 3 combines reading, writing, grammar, and spelling into a comprehensive course. Students will explore diverse fiction and nonfiction by reading novels, poems, informational texts, plays, and shorter pieces of fiction. 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 be produced, including narratives, opinions, informative essays, letters, and poems. Proper grammar and spelling are also taught, including elements such as the parts of speech, proper capitalization and punctuation, figurative language, verb agreement, and types of sentences. The reading selections for this course include *Ramona Quimby, Age 8; Owen and Mzee; Who Was Roberto Clemente?*; and *Charlotte’s Web*.

**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 are expected to understand and master basic multiplication and division facts. 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 is 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.
Fourth Grade

Language Arts 4

Language Arts 4 integrates reading, writing, speaking, listening, and the study of vocabulary and grammar in a way that engages today’s learners and supports them in building a broad and diverse set of literacy skills. This is a literacy-based class, as students will read four novels and a variety of short stories, plays, poems, and story books to emphasize language arts content and skills. Writing assignments in the first half of the year focus on narrative and persuasive modes and emphasize the use of reasoning and details to support opinions. Each writing assignment spans several lessons and guides students through a writing process that begins with prewriting and ends by emphasizing one or more aspects of conventions of standard written English. The second half of the year teaches specific skills for reading poetry, drama, and informational text. Students will learn how informational text differs from literary text and how different forms of informational text differ from each other. Writing assignments emphasize expository writing and guide students through research projects. Near the end of the semester, students learn how to present information orally while using multimedia. In each lesson, engaging and relevant models and step-by-step instruction guide students toward mastery and appreciation of 21st century communication in all its forms and functions. In the Blended Classroom, students will self-select four novels to read from the following titles: Bud, Not Buddy; Tales of a Fourth Grade Nothing; The Tale of Despereaux; Pictures of Hollis Woods; Shiloh; and Wringer. In the Virtual Classroom, students will read Bud, Not Buddy; Tales of a Fourth Grade Nothing; Frindle; and Where the Mountain Meets the Moon.

Mathematics 4

In Mathematics 4, students build upon their knowledge of multiplication and division in order to understand the relationship between operations and multiply and divide with larger numbers. Fractions are a major topic of study with students making equivalent fractions, comparing fractions, adding and subtracting fractions, and investigating the relationship between fractions and decimals. Students explore geometric concepts including properties of polygons, measuring angles, and identifying symmetry in shapes. Additional topics studied include standard and metric measurement, data, money, and graphing. Real life scenarios will be solved through the use of problem solving techniques.

Science 4

Science 4 students will develop into scientists as they continue to explore the biological, physical, earth, and environmental sciences. Specific units relate to genetics; force, motion, and energy; sound; properties of matter; earth and space; natural resources; the environment; and ecology. Students will have the opportunity to conduct numerous scientific experiments, and will learn about the many career paths in various scientific fields.

Social Studies 4

In Social Studies 4, students will explore the early development of the United States. In the first half of the year, students will explore Native Americans and their interactions with early European Settlers. The establishment of the American colonies and early American government is also introduced. Students will learn about important documents in the founding of the United States and the establishment of rules and laws that has led to the formation of federal and state governments in the United States as we know them today. Students will have the opportunity to explore their own state government and learn more about the rules and regulations that govern where they live. In the second half of the year, students will continue to learn about the most important events in American History to post-WWII, including science and inventions that helped shape the modern-day United States. Various concepts including economics, the environment, and American geography are interwoven into the content to give students a better idea of all the facets that shape American lives today.
Fifth Grade

Language Arts 5

Language Arts 5 integrates reading, writing, speaking, listening, and the study of vocabulary and grammar in a way that engages today’s learners and supports them in building a broad and diverse set of literacy skills. This is a literacy-based class, as students will read four novels and a variety of short stories, plays, poems, and story books to emphasize language arts content and skills. Students will study classic literature as well as more contemporary forms. Along with learning about and reading a variety of fiction, this course also focuses on skills for reading and analyzing informational text. Writing assignments focus on narrative, persuasive, and expository modes and emphasize the use of reasoning and details to support opinions. The writing process and standard conventions of grammar and spelling are integrated into writing instruction. Towards the end of the year, students will complete a research project and create an accompanying oral multimedia presentation. In each lesson, engaging and relevant models and step-by-step instruction guide students toward mastery and appreciation of 21st century communication in all its forms and functions. In the Blended Classroom, students will select four novels to read from the following titles: Because of Winn-Dixie, Number the Stars, The Watsons Go to Birmingham - 1963, Out of the Dust, The Island of the Blue Dolphins, and Maniac Magee. In the Virtual Classroom, students will read Number the Stars, The Island of the Blue Dolphins, Who Was Amelia Earhart?, and The Map Trap.

Mathematics 5

Mathematics 5 focuses on developing students’ mathematics skills and problem-solving strategies. Problems and activities are designed to get students reasoning abstractly and quantitatively, constructing arguments, and modeling with mathematics. In this course, students add, subtract, and multiply fractions, divide fractions by whole numbers, and divide whole numbers by fractions. They perform multiple operations with decimals along with comparing, ordering, and rounding them. They use exponents to denote powers of 10. Students are introduced to volume and how to calculate it, and they learn to classify two-dimensional shapes into categories. They also graph data on a line plot and the coordinate plane and use graphs to solve real-world and mathematical problems. Course topics include place value and operations, multiplying and dividing whole numbers, decimal operations, fraction operations, expressions and equations, patterns and graphing, measurement, geometry, volume, and data analysis.

Science 5

Science 5 continues to build on elementary science skills and content in preparation for middle school science. Students will begin the course by looking into the scientific process and the importance of investigations and conclusions in the study of science. Next, students will focus on earth and space science by looking at the solar system and planets. Students will come to an understanding of the concept of the Earth as a sphere and the Earth’s place in the solar system. The course continues with a focus on physical science and the different tools that can measure force, time, and distance. Students will grow in their understanding of how light and sound travel and interact with each other, as well as growing their knowledge of different types of energy. The second half of the course includes an in-depth look into life science and the ways organisms are interconnected. Students will learn the different types of ecosystems that exist, how they are interdependent, and how changes to an ecosystem affect the ability to support their populations. Learners will examine plants and their different structures and how those structures allow them to respond to different needs. The course closes with an understanding of the importance of good nutrition to all living organisms.

Social Studies 5

Social Studies 5 puts American history front and center, as students learn about the Native American civilizations of the Americas, the discovery of the New World by European explorers, the founding of the United States, westward expansion, and the coming of the Industrial Revolution. Students are also introduced to Pennsylvania history. Students broaden their understanding of government by recognizing how the system of checks and balances works at both national and state levels, and they identify and interpret important songs and symbols of the United States. Civic responsibility is woven throughout the curriculum, and students learn to recognize the value of public service and the traits of good leaders. Social Studies 5 also explores the themes, tools, and techniques of geography. Students learn how human interaction with the environment has caused change, both beneficial and detrimental, in the past and in the present. Finally, students study how the U.S. economy functions, including the role of government and multinational organizations in domestic and international trade.
Sixth Grade

**Language Arts 6**

Our world is full of stories. Everywhere we go, we see stories form around us, recognizing that we, too, are part of a bigger story. In Language Arts 6, students will learn the deeper truths of storytelling and the elements that bring these ideas to life. Considering the modes of both fiction and nonfiction, students will engage with lessons in plot, character, dialogue, theme, setting, and more. Utilizing and developing critical thinking skills and analysis will occur throughout the course. Students will also be exposed to elements of writing including analytical, persuasive, informative, and narrative pieces. They will also be engaged in the writing and analysis of poetry and drama. The course focuses on the areas of grammar and mechanics with a strong development of sentence structure and paragraph formation. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are selected by students from a list of options. These selections include *The Giver, The Watsons Go to Birmingham-1963, Walk Two Moons, The Westing Game, Freak the Mighty, Seedfolks, True Confessions of Charlotte Doyle,* and *The House of Dies Drear.* Students in the Virtual Classroom will read a series of extended texts through each quarter. These texts include *Wonder, Auggie and Me: Three Wonder Stories, The Watsons Go to Birmingham-1963,* and *The Giver.* Language Arts 6 is a textbook-free course.

**Mathematics 6**

Mathematics 6 provides a solid foundation by covering major mathematical concepts including fractions and decimals. In this textbook-free course, students will begin to work with equivalent expressions, rational numbers, and equations and inequalities. Other major areas of study include statistics, graphing, ratios, and the area and volume of shapes.

**Science 6**

Science 6 engages students in life and physical science and beyond! Students will have the opportunity to learn the basics of conducting and designing experiments, investigating the world around them, and understand what it takes to be a scientist. From classifying organisms to learning the basic properties of matter, students hone their observation skills and learn how to ask scientific questions. Labs, videos, and activities extend their understanding of the science around them. Science 6 is a textbook-free course.

**Social Studies 6**

Social Studies 6 begins by introducing students to the beginnings of ancient civilization. Students will trace the path of human origins and follow human migration around the Earth. This textbook-free course will help students understand why we study history and the process in which we form conclusions about events in the past. Students will learn about the major ancient civilizations of the world and study their cultures. Modern civilizations can trace their foundations to these ancient civilizations, and their cultures and histories teach us much about ourselves and the modern world in which we live. An emphasis will be placed on critical thinking and connecting themes in history to our modern world.
Seventh Grade

English 7
Through analysis of written, spoken, and multimedia texts, students will become more critical consumers of information and of various forms of media. They will also synthesize and organize ideas to prepare structured essays in several different modes, including narrative, persuasive, and expository. Each lesson will guide students in learning and applying specific strategies for reading and writing different types of texts. A review of basic English mechanics is included in many of the writing lessons, along with a discussion of levels of formality required for different purposes and audiences. This course provides instruction in many modalities, including audiovisual presentations and videos, interactive activities, projects, and discussions. Opportunities for teacher feedback are frequent, detailed, and varied. In this course, students study the English language closely—both its history and evolution, and the less obvious ways it can be used to convey meaning. The reading assignments and novels are selected to guide students in understanding how language can be used to convey broader themes in poetry, drama, and humorous or satirical texts. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are selected by students from a list of options. The selections include The Crossover, The Outsiders, Where the Red Fern Grows, Nothing But The Truth, The Cay, A Christmas Carol, and A Day No Pigs Would Die. Students in the Virtual Classroom will read a series of extended text through each quarter. The selections include The Crossover, The Outsiders, It’s Trevor Noah: Born a Crime: Stories from a South African Childhood (Adapted for Young Readers), El Deafo, and Fish in a Tree. English 7 is a textbook-free course.

Mathematics 7
Students in Mathematics 7 will extend their understanding of basic operations and increase their knowledge of ratios, rates, and proportional reasoning. Learners will also work with equations, factoring, and problem solving. In order to strengthen their understanding of coordinates, students in Mathematics 7 continue their study of the coordinate plane by working with ordered pairs, linear and nonlinear functions, and patterns. This textbook-free course offers a solid foundation in mathematics by exploring topics that include geometric concepts and probability. The work in geometry includes lines, rays, segments, angles, triangles, quadrilaterals, circles, irregular figures, prisms, and cylinders. Other topics in the course include polynomials, probability, multi-step equations, word problems, fractions, decimals, and absolute value. Mathematics 7 will prepare students for the study of Algebra.

Science 7
Science 7 explores the Earth, space, energy, and more! Students will continue to hone their experimentation skills and scientific understanding in this textbook-free course. Students will ponder the wonders of space, discuss their role in positive interactions with the environment, and think about the conservation of energy. Experiments, projects, and activities allow students to work as scientists and gain important understanding of a variety of scientific concepts that are encountered every day.

Social Studies 7
Social Studies 7 focuses on the history of the United States. This survey course emphasizes how ideas, events, and philosophies have shaped the nation. In this textbook-free course, students will learn about America’s past while mastering the skills of historical interpretation. Major topics in the first half of the course include Colonial America, the American Revolution, Manifest Destiny, the Civil War, and Reconstruction. The second half of the course focuses on the growth of industry, World War I, World War II, the Civil Rights Era, and the Vietnam War. Social Studies 7 uses a skill-development approach to guide students from early U.S. history to the present.
## Eighth Grade

### English 8

In English 8, students will read and analyze various kinds of written texts, including novels and short fiction, informational texts representing a wide range of topics and forms, and several one-act plays. They will explore the nature of creativity, the processes that tend to produce good literature, and the features of experimental and multi-genre forms of fiction. Students will participate in writing their own narratives and essays, using the readings and class discussion as sources of ideas for reflection, analysis, and argument. They will learn better ways to discuss their thoughts and perceptions with others by practicing their skills in collaborative discussions, journals, and presentations. Special emphasis is placed on reading in certain content areas, such as science and history, as well as understanding and thinking critically about news and media sources. In the process, they’ll study the impact of point of view on nonfiction texts. Students will also study the relationship between poetic expression and several conventions of language. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are selected by students from a list of options. The selections include *Stargirl*, *Anne Frank: Diary of a Young Girl*, *The Pearl*, *That Was Then - This Is Now*, *Across Five Aprils*, and *My Brother Sam is Dead*. Students in the Virtual Classroom will read a series of extended text through each quarter. The selections include *Stargirl*, *Anne Frank: Diary of a Young Girl*, *Brown Girl Dreaming*, and *Manga Classics: The Stories of Edgar Allan Poe*. English 8 is a textbook-free course.

### Mathematics 8

In Mathematics 8, students explore a variety of concepts and learn to implement real-world applications to the more abstract algebraic concepts found throughout the course. Multi-step equations, graphing lines, and interpreting slopes are just a few of the concepts students will work with to gain a solid understanding of algebraic equations and problem solving. Additional topics students explore include number systems, square roots, sequences, rational and irrational numbers, linear and algebraic expressions, probability and data representation, surface area, and the Pythagorean theorem. After completing this textbook-free course, students will be prepared for Algebra I.

### Science 8

Science 8 expands upon students’ understanding of the structures of the Earth, interactions within the environment, and life connections. Students will work on further developing critical scientific skills that allow them to effectively ask questions, design experiments, collect and analyze data, and communicate results. They will consider how humans can both positively and negatively affect population, environment, and self at the local, national, and global scale. Connections to scientific content are made through projects, activities, and experiments that deepen student scientific understanding. Science 8 is a textbook-free course.

### Social Studies 8

Social Studies 8 focuses on the significance of government, law, and politics. Students will examine the purposes and functions of federal and state government, law, and political systems. In the first half of the course, students will evaluate the role of civic responsibility to their families, communities, and country including voting and being a productive member of society. The second half of the course takes a more individualistic approach as students closely examine topics such as the justice system, local government, the environment, and the economy. Learners will understand the role that they play in each of these topics and the differences they can make. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others, including those with disabilities. By the end of this textbook-free course, students will have a deeper understanding of their civic responsibilities as well as the difference one individual can make in society.


**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, students in grades K through 6 are required 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. **Looking to have a little more fun in Physical Education?** Students in grades 3-6 have the option to take Physical Education with a live instructor one day a week. Students can record this hour on their Physical Education log towards the completion of the 36 hour requirement.

**Physical Education 7-8**

Pennsylvania Public School Law requires all students to complete an annual course in physical education. In compliance with the law, students in grades 7 and 8 are required 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. **Looking to have a little more fun in Physical Education?** Students in grades 7 and 8 have the option to take Physical Education with a live instructor one day a week. Students can record this hour on their Physical Education log towards the completion of the 72 hour requirement.

**Middle School Health**

By taking Middle School Health, students begin to learn about and adopt healthier lifestyles, diets, exercise routines, and family dynamics. This course covers topics from improving lifestyles to nurturing familial relationships to lessening stress and promoting longer, healthier lives. Students study mental health and how it impacts the overall health of any individual directly. Finally, students learn more about decision making and executing decisions that lead to improved overall health. Topics in this textbook-free course include nutrition, fitness, family, peers, the health triangle, communication, conflict, emotions, disease and disease prevention, alcohol, drugs, tobacco, sexually transmitted diseases, abstinence, and health services. This course is appropriate for grades 7-8.

**Middle School Nutrition and Personal Fitness**

Middle School Nutrition and Personal Fitness encompasses a variety of topics with a focus on nutrition, dietary needs, and physical fitness. In this textbook-free course, students develop a foundation within the basics of nutrition principles and practices, learn to read food labels, and understand food safety concerns. In regards to physical fitness, students are exposed to exercise guidelines that promote healthy lifestyles. This course is appropriate for grades 7-8.
Fine Arts (K-8)

Students in grades Kindergarten through seventh grade are required to take an ArtsAlive! course each school year in order to meet the Pennsylvania Department of Education’s Fine Arts requirement. Students in grades Kindergarten through fifth grade will be required to take the ArtsAlive! course that corresponds to their grade level. Sixth and seventh grade students will take an ArtsAlive! Middle course. Eighth grade students are required to take Art and Music Exploration to meet their fine arts requirement.

ArtsAlive! 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. ArtsAlive! 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 ArtsAlive! video, activity, and assessment is aligned with state and national standards.

GRADES K-5

Students in grades Kindergarten through fifth grade will be enrolled in the class that corresponds to their grade level.

ArtsAlive! Kindergarten

ArtsAlive! Kindergarten is an engaging exploration of the arts through visually-striking lessons in music, theater, dance, and the visual arts. Students are exposed to various forms, styles, and genres within each discipline by exploring each arts’ elements, brief history, and key creators. Through hands-on projects, students are encouraged to think creatively and have fun! Accompanying ArtsAlive! Kindergarten is a series of storybooks that follow two young students, Kate, a squirrel, and Oliver, a beaver, as they, too, learn about art in their forest classroom from their eccentric teacher, Dr. Albert, the owl.

ArtsAlive! First Grade

ArtsAlive! First Grade guides students through a captivating exploration of the arts through a series of media-rich lessons in music, acting, creative movement, the visual arts, and creative storytelling. Students are exposed to many forms, styles, and genres of art from around the world. The lessons in ArtsAlive! First Grade connect students to the overall theme of character, which is explored throughout each discipline. Through hands-on projects, students are encouraged to think creatively and have fun while deepening their appreciation for the arts. Accompanying this course is a series of storybooks that continue to follow two young students, Kate and Oliver, and their friends as they move into the fascinating world of the first grade.

ArtsAlive! Second Grade

Through a series of engaging, media-rich lessons, ArtsAlive! Second Grade takes students through lessons in music, acting, creative movement, the visual arts, and creative storytelling. Using a wide range of artistic genres, styles, and forms, students will explore the theme of setting through hands-on projects and creative exercises. Each lesson is created to encourage and foster original thought while also providing a deeper artistic appreciation for each student. Accompanying this course is a series of storybooks that continue to follow two second grade students, Kate and Oliver, and their friends as they learn and grow in the second grade.

ArtsAlive! Third Grade

ArtsAlive! Third Grade fosters students’ creativity and self-expression through a series of fun, engaging, and thought-provoking lessons in creative writing, music, acting, dance, and the visual arts. Using hands-on projects throughout the course, students explore the theme of artistic form and structure as they relate to all the arts. While learning artistic structure, students will explore their creativity and continue to grow a deeper appreciation for their own self-expression. Accompanying this course is a chapter book that takes students on a journey along with two other third-grade students, Kate and Oliver, and their friends as they learn and create throughout their third grade experience.
**ArtsAlive! Fourth Grade**
In ArtsAlive! Fourth Grade, students will explore creativity and self-expression through media-rich lessons in creative writing, music, acting, dance, and the visual arts. Through lessons and hands-on projects, students will explore the theme of point of view as it relates to the arts as a whole. While exploring the concept of point of view, students will use their creativity to grow a deeper understanding and appreciation of the arts and their own self-expression. Accompanying this course is a chapter book that encourages students to relate the ArtsAlive! lessons to their own experiences through a series of fun and engaging stories told by Kate, Oliver, and their friends.

**ArtsAlive! Fifth Grade**
In this course, the arts come alive through a series of engaging, media-rich lessons! ArtsAlive! Fifth Grade takes students through topics in music, acting, dance, the visual arts, and creative writing by diving into their elements and fundamentals. Students will explore a wide range of artistic genres, styles, and forms—both modern and historic, through hands-on projects and creative exercises. As students experience these lessons and exercises, they are encouraged to foster their own creativity by engaging in unique, original thought. Students will also gain a deeper, life-long appreciation for artists, musicians, actors, dancers, and writers. Accompanying this course is a chapter book that continues to follow two fifth-grade students, Kate and Oliver, and their friends through their education, both in school and out, as they continue to learn and grow.

**GRADES 6-7**
Sixth and seventh grade students will be registered for an ArtsAlive! Middle course based on the ArtsAlive classes they have previously completed.

**ArtsAlive! Middle 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 across all disciplines. Students will also study the development of techniques for perceiving, interpreting, and decoding works of art.

**ArtsAlive! Middle 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.

**ArtsAlive! Middle Theme Three – America: An Arts Melting Pot**
The third year of ArtsAlive! Middle 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.

**ArtsAlive! 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 ArtsAlive! Middle is dedicated to exploring the role of personal and collective creativity in arts – and in everyday life.

**ArtsAlive! Middle Theme Five – STEAM-Powered Learning**
This year of ArtsAlive! Middle 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.
ArtsAlive! Middle Theme Six – What’s the Big Idea?
ArtsAlive! Middle 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.

ArtsAlive! Middle 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 ArtsAlive! Middle, 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.

GRADE 8

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 recordings, 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.

Career Readiness (K-8)
The landscape of career and college readiness is rapidly changing. The Pennsylvania Department of Education requires all public schools to provide career and college readiness programming to all students in grades Kindergarten through 12.

Students in grades 2, 5, and 8 are required to complete one of the career classes listed below to meet the requirement set forth by the Commonwealth. These courses are asynchronous and are developed around Xello and Career Cruising’s online software. By the end of each course, students will create a portfolio of work that follows them through their educational journey.

Future Forward 2
Second grade students will be introduced to the world of careers and work through Xello’s online career exploration software to help the residents of Career Town solve a mystery. Students will learn about different types of jobs that people do to earn a living. They will also examine their own interests and abilities to think about what they might like to do when they grow up. By the end of this course, students will reflect on their interests and talents to develop multiple pieces of work to begin a career portfolio.

Future Forward 5
Fifth grade students will learn about careers, work, and entrepreneurship in this course. Students will utilize Xello’s online career exploration software to learn more about themselves and the world of work and careers. Through this course, students will understand how their interests, skills, and talents can help them determine potential career paths for their future. By the end of this course, students will use what they have learned to add multiple pieces of work to their career portfolio.
Career Forward 8

Eighth grade students will expand their knowledge of career awareness and begin to develop a plan for their life after school. Students will complete personal interest inventories and explore potential careers by participating in a range of activities using the online Career Cruising program. In Career Forward 8, students will learn what types of careers they may be interested in and how to use those interests to create an initial career plan. This textbook-free course will allow students to practice effective speaking and listening skills, and give them the opportunity to learn more about personal finance and entrepreneurship. Career Forward 8 will help students plan a path for high school success and beyond.

Elementary and Middle School Electives (Grades K-8)

Art K

In Art K, students are introduced to the ways in which they can express ideas and demonstrate their creativity through art. Throughout this course, students are encouraged to use their imagination to create art. They use a wide variety of materials to make their artwork, and they learn safe methods for using those materials. They explore the importance of working with others by collaborating both to create art and to solve artistic problems. Students use multiple techniques while working with the same artistic medium, and they create various scenes, including a nature scene, a construction scene, and an underwater scene. In addition, Art K encourages students to begin thinking about the artwork of others. They learn about well-known artists and the common tools those artists used. They also learn about art museums and consider how pieces of artwork make them feel. Finally, students create works of art that are of a more personal nature, including art depicting their own community, a self-portrait, and an illustration of their favorite book. Throughout Art K, students learn art terminology so that they are able to connect ideas and demonstrate the beginnings of a strong artistic foundation.
Art 1
In Art 1, students learn how daily life can be used as inspiration, and how it can be depicted through artwork. They categorize artworks according to the subject matter each is portraying. Additionally, students learn to recognize the elements of art and the principles of design, and they rate artwork. Students explore the ways in which artwork is created outside of the school setting, and they discover that art is made for different reasons. As practicing artists, students will develop their art vocabulary, art understanding, and artistic skills as they work through prompts supplied in the course.

Art 2
In Art 2, students explore artistic expression. They also learn to organize art into categories and to identify the various methods and materials used to create art. Throughout this course, students expand their artistic vocabulary, using it to describe the works they are studying. They explore the ways in which color can represent mood in artworks and create their own works to express their mood. While learning safe procedures for working with artistic materials, students experiment with mixing colors. In addition to creating artworks that depicts family, school, and community life, students also gain familiarity with works from European and Asian cultures.

Art 3
In Art 3, students create, experiment, revise, present, analyze, and respond to artwork. Students learn the importance of presenting their art and the necessary components to consider when doing so, such as the display space, artwork preparation, and display limitations. Students revise and enhance their art in order to tell a better visual story. They also learn how to ask important questions regarding the imagery and materials an artist uses to better understand the message of the work. Art 3 gives students the observation tools they need to perceive their world and create art based on what they see and how they feel.

Art 4
In Art 4, students begin thinking about the meaning behind works of art. They work both independently and collaboratively to brainstorm ideas for visual art, set artistic goals, and create meaningful artistic pieces. Students experiment with oil pastels and nontraditional art-making approaches and materials. They explore how regional influences can inspire an artist and create their own art based on regional inspirations. Students observe the various ways in which art can be displayed, where it can be displayed, and how its placement can impact the artist’s message. Students compare and contrast works from different cultures and create art to reflect their own cultural traditions. They also learn to use context to interpret artwork and infer information about the time, place, and culture in which works were created.

Art 5
Art 5 gives students opportunities to work with a wide range of materials, from metal to watercolors, all while further developing their techniques and skills as artists through repeated practice. Students learn to analyze, interpret, and talk about art with their peers as well as other admirers of art. They are introduced to the idea of cultural associations and perceptions and are asked to look at imagery critically. In doing so, students learn to decide how the details of their own work could be interpreted by others. Throughout this course, students create artwork that will bring attention to topics they find important. Their work will illustrate their awareness of their surroundings and will show their developing artistic abilities.

Art 6
Art 6 encourages students to collaborate to create art. Students investigate how art can be personally significant while learning to be open to new artistic ideas, materials, methods, and creative approaches. In this course, students also explore the ways in which art equipment and materials can affect the environment. They study why and how artistic design can influence people, and they design art for a diverse population. Students also determine whether works of art successfully communicate their intended message. This course introduces three-dimensional art, and students compare two-dimensional and three-dimensional pieces before creating their own 3-D artwork. They will view art from around the world and determine what the works reveal about the values and lifestyles of the people depicted in the works. Finally, students learn the importance of preserving art and the ways in which to critique art.
Art 7
In Art 7, students transition from exploratory art discovery to a more discipline-based approach. This new approach focuses on developing students’ skills and techniques as well as content knowledge, while still allowing for exploration and individuality. Students have the opportunity to act as real artists through repeated sketching, concept development, and continued research and observation activities while they work with a variety of media. Art 7 includes a strong focus on independent, creative thinking and problem solving through project-based learning. This course is designed to cover a half year of instruction, but it can be completed at each student’s own pace. The project-based activities have dedicated, multi-day lessons to allow students time to sufficiently and successfully develop their ideas and artwork.

Art 8
In Art 8, students will be introduced to design elements and principles, as well as contemporary art-making processes. In addition, students will explore the act of conceptual thinking.

Coding and 3D Design
Learn new digital skills in this class about computer programming and 3D design. Students learn to write code by creating programs for the Circuit Playground, an electronic device that includes lights, sounds, and even motion detection! Essential coding skills will be covered, including topics such as input/output, loops, conditionals, and functions. Additionally, this course includes 3D design projects with a focus on making designs for 3D printing. Students will learn design thinking skills through 3D projects that emphasize measurement, tolerances, material properties, and manufacturing processes. This textbook-free course is appropriate for students in grades 6-8.

Cursive Handwriting
In this Cursive Handwriting course, students will have the opportunity to learn the art of cursive handwriting. This course uses videos and written lessons to demonstrate and explain how each letter is formed and written. Students will practice their cursive writing using engaging worksheets. This course is appropriate for students in grades 2-8.

Introduction to Computer Programming
This course allows students to gain insight into the world of computer programming, data processing, scripting, and coding. Through Introduction to Computer Programming, students are frequently challenged with problems that require different programs and scripts to resolve. Students will look into careers within this realm by focusing on security in technology, creative software, animation software, and hardware programming. In this textbook-free course, students also cover the basics of computer programming, ensuring they are well-rounded, computer-minded students. Some topics students will explore include technology quality assurance, programming languages, encoding and decoding, scripting and coding, databases and data processing, file management, ergonomics, and adaptive technology. This course is appropriate for students in grades 6-8.

Introduction to Foreign Language
Introduction to Foreign Language is geared toward students who are interested in taking a foreign language, but are not sure in which language they would like to begin their studies. This course provides the perfect introduction to the German, Spanish, and French languages, while exploring culture and other important dynamics. Basic vocabulary and structures of each language are introduced in a fun and educational way in this textbook-free course. Introduction to Foreign Language is appropriate for grades 6-8.
### Introduction to Typing

Students who are interested in learning proper typing techniques and increasing their typing speed or WPM (words per minute) are a perfect fit for this introductory course. Introduction to Typing is an exciting beginner's course that teaches proper techniques through interactive and engaging lessons and activities. In this textbook-free course, students have the opportunity to learn proper posture, finger positioning, and typing strategies. Some topics explored in this course include internet safety and netiquette, rapid typing lessons, formatting documents, punctuation and spacing rules, and QWERTY and numeric keyboards. This course is appropriate for grades 6-8.

### Music K

In Music K, students are introduced to the expression of ideas and creativity in music through active involvement. Students will respond, connect, perform, and create music to enhance gross and fine motor skills, vocal development, self-expression, personal connection, originality, visual recognition, and audiation while developing music terminology. Some of the topics explored within this course include rhythm, tempo, pitches, melodic direction, dynamics, and AB forms.

### Music 1

In Music 1, students are introduced to music fundamentals such as solfège, rhythms, dynamics, meter, instrument families, and dance forms. Each topic is presented through the use of music and movement activities that include reading, singing, dancing, and writing. Students improvise original rhythmic compositions. They sing using various forms of musical expression and dance. They learn and practice proper stage and performance etiquette techniques, and they explore the ways in which music and dance work together to create specific dance forms. Students also learn about American composers whose music has influenced the American society.

### Music 2

In Music 2, students explore musical expression. They investigate how musical concepts such as tempo are used to achieve the musician’s expressive intent. Students identify the role and responsibility of a music composer and seek out the connections between music, other arts, daily life, and history. Throughout the course, they perform songs with movements and improvise rhythmic patterns and melodies. They create and record musical ideas through a recording device or on paper. Students learn to identify how personal interests and experiences influence music selection and instrument choice. Through these studies, they evaluate music from the Irish, African, and Japanese cultures. Additionally, they work with standard and iconic notation. Finally, students use the musical skills learned in this course to evaluate recorded music and make suggestions for improvement.

### Music 3

In Music 3, students explore musical basics such as melody, harmony, dynamics, tempo, timbre, texture, and context. They also reflect upon how these elements affect a listener’s response to the music. Students use standard notation to read and write notes and rhythm in the treble clef and then practice playing those notes on instruments including the hand drum, rhythm sticks, and the soprano recorder. They learn about new musical ideas such as the pentatonic sound, major and minor scales, and singing in solfège. Finally, students identify key classical composers and explore new musical genres such as blues, bluegrass, country, jazz, and pop music.

### Music 4

In Music 4, students identify how the elements of music (melody, harmony, timbre, dynamics, and tempo) affect what a piece of music communicates to a listener. Students label or perform three different examples of rhythm in addition to musical notes such as the eighth note and the sixteenth note. They identify notes on the bass and treble clef. Students learn the difference between sharps and flats and major and minor scales. They create simple melodies with chords and mark tempo, time signature, and signature key. Students explore different musical characteristics and instruments from Africa in addition to Latin American and Celtic music and dance. Finally, students explain how social and cultural contexts influence a musical performance.
Music 5
In Music 5, students demonstrate their ability to create, perform, analyze, and respond to music while making connections to personal, social, cultural, and historical perspectives. By the end of the course, students will be able to read music notation, compose music, and improvise original melodies. Students will also apply what they learn through interactive learning activities and performances on a variety of instruments including, but not limited to, the tambourine, rhythm sticks, maracas, and the soprano recorder.

Music 6
In Music 6, students express ideas and creativity through music. Students apply music terminology to different instrument groups and learn to read music. Additionally, students discuss different forms of music and popular songs within Western and worldwide music. Additional topics include music genres, the history of recorded music, improvisation, beginning composition, piano and its famous composers.

Music 7
In Music 7, students explore the history, development, and attributes of American music. They will learn music theory and music reading skills, which are presented and reinforced within the context of historical musical works. Students interpret sheet music that represents various genres of American music. Additionally, students practice performing music vocally and with a pitched instrument. Additional topics include foundations of music, musicalities, musical architecture, westward bound, turn of the century, taking the stage, pop music, and music of the future.

Music 8
In Music 8, students are introduced to a variety of music genres and instruments. Students explore the concepts of rhythm, melody, timbre, texture, dynamics, form, and rhythm, and they learn how to sight read music. Students listen to various examples of songs to interpret performances, and they compose and perform their own song. Additional topics include music theory, elements of music, families of instruments, music genres, world music, talent competitions, sight reading, writing music, and composing.

Scratch Coding
Scratch is a program developed by MIT that teaches students the basics of how computers think. This program will introduce students to real coding programs and allow them to drag and drop coding blocks, creating a fully functional program. The simple user interface and tutorials allow students to quickly create and run their code to see its results. This course assumes no prior computer coding knowledge and includes self-graded multiple-choice tests and quizzes. Scratch coding is a textbook-free course, and is appropriate for students in grades 6-8.
9–12 High School

Graduation Requirements

<table>
<thead>
<tr>
<th>Credits</th>
<th>Subject</th>
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<tbody>
<tr>
<td>4.0</td>
<td>English Language Arts</td>
</tr>
<tr>
<td>4.0</td>
<td>Mathematics (1.0 credit in Algebra I required)</td>
</tr>
<tr>
<td>3.0</td>
<td>Science (1.0 credit in Biology required)</td>
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<tr>
<td>4.0</td>
<td>Social Studies</td>
</tr>
<tr>
<td>2.0</td>
<td>Fine Arts</td>
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<tr>
<td>3.5</td>
<td>Electives (0.5 credit Career Forward 11 required)</td>
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<tr>
<td>1.0</td>
<td>Physical Education</td>
</tr>
<tr>
<td>0.5</td>
<td>Health</td>
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<tr>
<td><strong>22.0</strong></td>
<td>Total Required for Graduation</td>
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</tbody>
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The Pennsylvania Cyber Charter School requires all students to complete Career Forward 11 in order to be eligible for graduation.

Beginning with the graduating class of 2023, statewide graduation requirements provide pathways for high school students to demonstrate readiness for postsecondary success as outlined in Act 6 and Act 158.

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.
9-12
High School Courses

English Language Arts
Four credits in English Language Arts are required for graduation.

English 9
English for grade 9 is an integrated curriculum. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, including word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Writing assignments include narrative, expository, and persuasive/argumentative modes and emphasize the use of details and reasoning to support ideas. Course lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Vocabulary development instruction is integrated into literature and informational text lessons. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are self-selected by the student. These selections include *Romeo and Juliet*, *To Kill a Mockingbird*, *The Old Man and the Sea*, *House on Mango Street*, *Fahrenheit 451*, *The Odyssey*, *Ender’s Game*, *Speak*, and *Of Mice and Men*. Students in the Virtual Classroom will read two required texts including *To Kill a Mockingbird* and *Romeo and Juliet*. Additionally, students will complete an independent novel study where they can choose from the following novels: *Ender’s Game*, *House on Mango Street*, *Fahrenheit 451*, or a different teacher-approved novel. English 9 is a textbook-free course. **Pre-Requisites:** None

English 10
English for grade 10 is an integrated curriculum, with each unit consisting of thematically related lessons in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, including word knowledge and grammar skills. Skills practiced in this course are similar to the skills in English 9, but require more independence and depth of thought. An introductory lesson at the start of each unit helps students identify any areas of weakness and review those topics. Literature study in this course focuses on the analysis of different forms of literature and as well as the evaluation of various modes and forms of writing. Writing assignments required in this course include fiction, expository, persuasive, and analytical modes, emphasizing the use of details, evidence, and reasoning to support ideas. Course lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations. Speaking and listening lessons cover how to plan and deliver informative speeches and presentations. Vocabulary development instruction is integrated into literature and informational text lessons. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are self-selected by the student. These selections include *Animal Farm*, *Night*, *Twelfth Night*, *Catcher in the Rye*, *The Bean Trees*, *All Quiet on the Western Front*, *Lord of the Flies*, *Farewell to Manzanar*, and *Antigone*. Students in the Virtual Classroom will read the required texts *Twelfth Night*, *Night*, and *Animal Farm*. Additionally, students will complete an independent novel study where they can choose from the following novels: *Farewell to Manzanar*, *The Bean Trees*, and *Lord of the Flies*, or students may choose another teacher-approved novel. English 10 is a textbook-free course. **Pre-Requisites:** English 9
**English 11**

English for grade 11 is an American literature course. Course units are organized chronologically according to periods in literary history, with a focus on historical eras and literary movements. As students read foundational works of literature and other historical documents, they will review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, including word knowledge and grammar skills. Each module, or unit, begins with a lesson that provides historical context and introduces themes that emerged in the literature of that era. Each literature lesson provides students with an opportunity to review basic analysis skills before applying those skills to works of literature or key historical documents. Writing assignments in this course include narrative, reflective, persuasive, analytical, and research-based modes. Students in the Blended Classroom will read extended texts independently throughout the course: two texts are pre-selected, and two texts are self-selected by the student. These selections include *The Great Gatsby, Death of a Salesman, The Scarlet Letter, Farewell to Arms, My Antonia, A Lesson Before Dying, Black Boy, and Adventures of Huckleberry Finn*. Students in the Virtual Classroom will read two required texts: *The Great Gatsby* and *The Crucible*. Additionally, students will complete an independent novel study where they can choose from the following novels: *Orphan Train, The Great Gatsby, Death of a Salesman, The Scarlet Letter,* and *Black Boy*, or students may choose another teacher-approved novel. *English 11* is a textbook-free course. **Pre-Requisites:** English 9; English 10

**AP English Language and Composition**

Being able to communicate effectively is one of the most important skills any student can learn. It is essential to every profession in every field of study. The focus of this course is on the most common form of communication in today’s world: writing. While other English classes focus on reading and analyzing texts to determine what the author is trying to say, AP English Language and Composition looks at how the author is conveying their message. Students will analyze various texts and the choices authors make as well as studying various strategies of effective writing. Students will also practice these skills in their own writing, mirroring the experience of a first-year college writing course. While this course is specifically aligned to prepare students to pass the AP Language and Composition test, the larger emphasis is on improving student writing through rigorous analysis, reflection, revision, criticism, and feedback. This is a College Board approved Advanced Placement Course, and students may receive college credit by earning a sufficient score on the AP Exam. **Pre-Requisites:** English 9; English 10; Letter grade of B or higher in previous English courses.

**AP English Literature and Composition**

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. Featured novels include *The Great Gatsby, The Namesake, Crime and Punishment, Brave New World,* and *Wuthering Heights*. These things and more will all be an important part to the collaborative study of literature. This course is a College Board-approved Advanced Placement course. **Pre-Requisites:** English 9; English 10; Letter grade of B or higher in previous English courses.
African American Literature
This discussion- and text-based course analyzes works written by African American authors from enslavement to the contemporary era. The course will examine a variety of influential Black and African American authors who helped to shape Black culture throughout history. This course will begin with contemporary texts that explore race and challenging social topics, then work through historical texts to analyze how history impacts our modern era. Students will be expected to participate in class discussions, create projects, and provide written reflections on the readings. Over the course of the semester, students will study major works from African American Enslavement, Reconstruction, the Harlem Renaissance, the Civil Rights Movement, and Modernism. Students will complete a quarterly presentation on major Black figures including artists, poets, scientists, and activists to highlight Black voices throughout history. In addition to short stories, poems, and other works, students will read the novels The Hate U Give, A Long Way Down, and Between the World and Me. Pre-Requisites: None

Classical Mythology
This textbook-free 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 objects such as planets, months, and days of the week. 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

Contemporary Young Adult Literature
In this advanced course, students will be exposed to quality and diverse young adult literature (YAL), and will discuss a variety of themes and coming of age issues. Today, 21st century students face different issues 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, mental illness, self-discovery, relationships, death, suicide, rape, abortion, and coming out. Students will read eight novels and the heavy reading load will require students to read outside of class. In addition, live class sessions require active participation. Students are expected to complete pre-class work prior to live sessions. Contemporary Young Adult Literature will include the following texts: Deadline; Catalyst; All the Bright Places; We Were Liars; Exit, Pursued by a Bear; Aristotle and Dante Discover the Secrets of the Universe; Dear Evan Hansen; and Long Way Down. Students and parents considering this course are encouraged to contact the school for additional information regarding the assigned texts and their subject matter. Pre-Requisites: English 9; English 10

Creative Writing
Creative Writing is a textbook-free workshop course in which students discover, analyze, and apply the methods and styles used in various forms of fiction, creative nonfiction, 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

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
Exploring Young Adult Literature

This upper level 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. Today, 21st century students face different issues 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. Various themes and coming of age issues will be addressed throughout this course making the literature relatable and interesting. The course will explore themes of alienation, family issues, self-discovery, relationships, death, suicide, and survival. In Exploring Young Adult Literature, students will read eight novels and the heavy reading load will require students to read outside of class. In addition, live class sessions require active participation. Students are expected to complete pre-class work prior to live sessions. Exploring Young Adult Literature will include the following texts: *The Outsiders*, *Tuesdays with Morrie*, *Speak* (both the novel and graphic novel), *The Fault in Our Stars*, *13 Reasons Why*, *The Alchemist*, *Staying Fat for Sarah Byrnes*, and *Every Last Word*. Students and parents considering this course are encouraged to contact the school for additional information regarding the assigned texts and their subject matter. **Pre-Requisites:** English 9; English 10

Global Mythology

Global Mythology offers students an interactive way to learn about myths found throughout the world. Each unit in this textbook-free course 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

Literary Explorations

The literature of the world is connected 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 *The Giver*, *Gathering Blue*, *Messenger*, *Anthem*, *Fahrenheit 451*, 1984, *The Road*, *Walden Two*, *Beowulf*, *The Hobbit*, and the *Lord of the Rings* trilogy. **Pre-Requisites:** English 9; English 10; English 11

Short Stories

Short Stories exposes students to the basic characteristics, writing style, and literary elements of a story. From characters, point of view, and setting to techniques such as suspense and irony, students learn how short stories provide readers with the opportunity to experience different storylines in a precise and defined format. Students 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. In this textbook-free course, students learn the importance of being concise, recognizing that good literature does not necessarily have to be lengthy in order to be captivating. **Pre-Requisites:** None

Technical Writing

Written communication skills and documentation in the business environment are central to the Technical Writing course. This textbook-free course enables students to understand a variety of documents and allows them to perfect their technical writing abilities. From journal writing, email, and directional writing to memos and letter drafting, students encounter numerous types of technical writing and build upon their technical skills and knowledge. **Pre-Requisites:** None
**Mathematics**

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

**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. Students are introduced 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 this textbook-free course, students will be required to take the Keystone Algebra I exam. Students who may need additional support completing Algebra I can discuss scheduling options with their Academic Advisor. **Pre-Requisites:** Mathematics 7 or Mathematics 8

**Geometry**

In Geometry, students create a solid foundation in mathematics by studying and exploring a wide range of geometric concepts. Students study the basics of geometric equations and how these equations are present in daily life. They calculate perimeter and work directly with angles and arcs to evaluate the importance of geometric mathematics in construction. Course topics include angle relationships, parallel and perpendicular lines, congruence, bisectors, trigonometry, and transformations. **Pre-Requisites:** 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. Rational expressions, the interpretation of functions, complex numbers, binomial expansion, and trigonometric functions are an important part of the course. Algebra II prepares students for more difficult mathematical concepts and content. **Pre-Requisites:** 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:** Algebra I; Geometry; Algebra II

**Advanced 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. This course uses college level materials, and students are encouraged to take the course concurrently with Pre-Calculus or Calculus when possible. **Pre-Requisites:** Algebra I; Algebra II; Letter grade of B or higher in Algebra II or strong recommendation of teacher

**Pre-Calculus**

In this textbook-free course, students will understand and apply concepts, graphs, and applications of a variety of families of functions, including polynomial, exponential, logarithmic, logistic, and trigonometric. An emphasis will be placed on the use of appropriate functions to model real-world situations and solve problems that arise from those situations. Graphing functions by hand and understanding and identifying the parts of a graph is also a major focus of Pre-Calculus. The second half of the course focuses on introductory trigonometry and graphs, trigonometric equations and identities, analytical trigonometry, sequences and series, conic sections and an introduction to calculus. **Pre-Requisites:** 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:** Algebra I; Geometry; Algebra II; Pre-Calculus

AP Calculus AB

AP Calculus AB is an accelerated course meant to prepare students who plan to take the Advanced Placement Calculus AB exam. AP Calculus AB teaches a balanced approach to problem solving, using analytical, algebraic, numerical, graphical, and verbal/written methods of representing problems. This course begins with a brief review of linear, polynomial, exponential, parametric, logarithmic, and trigonometric functions. Students also study the integral as an accumulation function, the area under a curve, and the volume of a surface of revolution. Students will explore the derivatives of functions, the chain rule, implicit differentiation, and the mean value theorem. The course also includes optimization, linearization, and related rates. Students will study definite integrals, antiderivatives, and the fundamental theorem of calculus. This course is a College Board-approved Advanced Placement course. **Pre-Requisites:** Algebra I; Geometry; Algebra II; Pre-Calculus; Letter grade of A recommended in all previous mathematics courses.

Business Mathematics

In Business Mathematics, students discover a variety of basic mathematical concepts and tools for real-world mathematical application including algebraic equations, formulas, operations using fractions, decimals, and percentages. This course shows students how to work with percentages to solve application problems and how to research investment and insurance options. Students learn to graph a function from an equation, and they work with ratios and proportions. Additionally, students explore the proper methods of preparing and analyzing income statements and balance sheets. They also study the ways in which to calculate real estate loan payments, and they learn to read and interpret graphs to represent data in the business world. This course also discusses mean, median, and mode as it relates to the distribution of data. Business Mathematics is a textbook-free course. **Pre-Requisites:** None

Consumer Mathematics

Consumer Mathematics shows students how math is used in everyday life. Students will review addition, subtraction, multiplication, and division of whole numbers, as well as fractions and decimals. The course instructs students on how to perform practical tasks such as calculating earnings from a job, shopping for and working with food, buying clothing, managing a household, purchasing and maintaining a car, and understanding interest rates. Consumer Mathematics teaches problem solving strategies and alternate methods of computation to solve a wide range of consumer problems. Consumer Mathematics is a textbook-free course. **Pre-Requisites:** None

Financial Literacy

Financial Literacy is designed to help students budget, keep a checkbook and filing system, deal with debt and credit, and become wiser consumers. Students will learn how money and the dynamics surrounding it affect their relationships, their lifestyles, and their retirement. Financial Literacy is a textbook-free course. **Pre-Requisites:** None
Three credits in Science, including Biology, are required for graduation.

**Biology**

Biology covers a wide range of concepts in the field of biology. Students will study the cell, including cell structure and function. The concept of the cell is extended, and students explore Mendelian genetics and how humans inherit traits. In addition, the course examines the structure and mechanisms of DNA, as well as the role of biotechnology in today’s society. Students also explore the theory of evolution, including early ideas, how populations evolve, and the history of life on Earth. Students discuss the concept of ecology, where they learn about different principles of ecology, interactions that occur within ecosystems, the biosphere, and how humans have impacted ecosystems thus far. Upon completion of this textbook-free course, students will be required to take the Keystone Biology exam.

**Pre-Requisites:** None

**AP Biology**

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 resources used, the range and depth of topics covered, laboratory work, and the time and effort required by students. AP Biology is structured to the four big ideas in biology: 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. This course is a College Board-approved Advanced Placement course.

**Pre-Requisites:** Biology; Chemistry or Physical Science; One additional science course; Letter grade of B 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. Bioinformatics is a textbook-free course.

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

**Astronomy**

In Astronomy, students begin by discussing basic astronomical concepts and discoveries throughout history. They take an in-depth look at the first moments of the universe by studying the Big Bang. From there, they investigate the evolution of the universe, beginning with the first atoms and moving on to explore elements, stars, solar systems, and galaxies. Students gather information to determine if there is a possibility of life on other planets and in other solar systems. In this textbook-free course, students analyze the major space missions that have led to the modern study of cosmology, and they explore the possibilities of where this field may take scientists in the future.

**Pre-Requisites:** None
Earth Science
In Earth Science, students learn the importance of scientific inquiry and how to communicate the results of scientific investigations. They study the formation of the universe, including the Big Bang Theory, the motions of celestial objects, and stellar evolution. Students learn about the sun, planets, and the movements of Earth. Earth Science also includes the study of weather, the water cycle, the atmosphere, and pollution. In addition, the course covers the physical structure of the Earth and Earth’s tectonic system, including the rock cycle, tectonic activity, mountain building, weathering, and erosion. Students will study geologic history, including the evolution of Earth’s atmosphere, the geologic time scale, and the fossil record. Earth Science explores natural resources and the effects of human population on those natural resources. The course concludes with a discussion of human society and its interconnectedness with the Earth’s environment, how science and technology work together, and the technological design process in earth science applications. Earth Science is a textbook-free course. Pre-Requisites: None

Environmental Science
Environmental Science introduces students to the scientific method, terrestrial and aquatic ecosystems, biomes of the world, trophic interactions, and nutrient and chemical cycles. Students analyze the human impact on the environment and ways to reduce negative consequences. In this textbook-free course, students will investigate environmental issues first hand and use their discoveries to make environmental decisions for themselves. Pre-Requisites: None

Fundamentals of Ecology
Fundamentals of Ecology, a textbook-free course, 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

Renewable Energy
The earth’s population is growing rapidly, and we need to find new, innovative ways to ensure that we are able to provide for our global energy needs. Students will look at the reasons why sustainability is important, take a balanced and evidence-based look at climate change, and learn new ways that we can harness renewable resources. In this textbook-free, semester-long class, students will look at a variety of topics surrounding renewable energy sources including wind, solar, hydro, and bio energies. Additionally, students will investigate the effect of different energy processes on the environment and ecological cycles. The course will wrap up with a look into practices to promote conservation of biodiversity. Pre-Requisites: None

Chemistry
Chemistry gives students a deeper understanding of the world around them as they investigate how chemistry is involved in everyday life. Students explore fundamental chemistry content and concepts, including the metric system, the periodic table, atomic structures, bonding, chemical reactions, and nuclear reactions. They apply their knowledge and science process skills through labs that use common, household objects in order to explore the practicality of chemistry. This course requires students to use fundamental algebra skills to solve problems. Course topics include the atom, defining matter, acids and bases, polar bonds and molecules, solutions, ionic bonding, thermochemistry, and nuclear reactions. Chemistry is a textbook-free course. Pre-Requisites: Biology; Algebra I

Physical Science
Students enrolled in Physical Science are introduced to the principles of chemistry and physics so that they may develop a better understanding of atoms and chemical and nuclear interactions. Students explore properties and states of matter. They will investigate chemical bonds and reactions as well as the development of the periodic table. An outline of modern atomic theory and organic and nuclear chemistry are also discussed. Additionally, students study Newton’s laws of motion while considering the interactions between motion, forces, energy, and thermodynamics. Physical Science is a textbook-free course. Pre-Requisites: Algebra I
Tips for being a successful PA Cyber high school student.

- Attend each virtual, blended, or asynchronous class every day.
- Participate in class activities and discussions.
- Complete all required reading, assignments, and homework each day.
- Share the work that you complete each day with your parent or guardian.
- Keep close contact with your teachers and Academic Advisor.
- Follow the proper pacing for each of your courses.
- Attend all Keystone testing as required.
- Get involved with PA Cyber clubs and other activities.
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, and will complete online labs, simulations, and animations. Pre-Requisites: Algebra I; Algebra II

Cutting Edge Science
This textbook-free course explores popular topics in the biological sciences, and will offer students the opportunity to utilize analytical science, biology, and anatomy. Cutting Edge Science is a course that requires scientific research, and will involve in-class discussions and presentations. Students will learn about new trends in research and technology and how each of these fields impact their everyday life. Students will discuss topics such as health and disease within a population with students learning how to utilize data to solve real world issues. Additional topics include sports medicine and forensics. New cutting edge sciences and technology will also be explored as they arise in current events. Pre-Requisites: Biology

Forensic Science
Forensic Science, a two-unit, textbook-free 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

Introduction to Engineering
The Introduction to Engineering course provides students with an overview of the field of engineering and the primary processes and procedures used by engineers. Students will explore engineering careers and their impacts on society, and they will learn how mathematics and science are used in the field of engineering. They will examine different engineering disciplines, the engineering design process, and different engineering styles and methods used in the field. Students will take part in hands-on learning as they work through a real-life design problem and solve it through the steps of the engineering design process. They will then create a presentation to demonstrate their solution to the design problem. Introduction to Engineering is a textbook-free course. Pre-Requisites: Algebra I, Geometry

Medicine
This textbook-free course provides students with an introduction to healthcare, with an emphasis on modern, clinical medicine. Students review basic human anatomy and physiology by studying the various body systems, and then study major health concerns affecting people in the U.S. and the world. This comprehensive course examines such topics as nutrition, infectious diseases, cancer, traumatic injuries, and healthcare career opportunities. Additional topics in this course include medical ethics, reproductive rights, and mental illness. This course is intended for students in grades 11 and 12 and is recommended for students interested in pursuing a career in the medical field. Pre-Requisites: Biology

Sports Medicine
This two-unit, textbook-free 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
Social Studies

Four credits in Social Studies are required for graduation.

African American History

African American History introduces students to the study of African American life, culture, and history. This course covers enslavement, life as a slave, and emancipation. It also discusses African American involvement in major wars, the civil rights movement, major societal contributions, and life in modern society. Students will examine the Nat Turner Rebellion, Jim Crow laws, civil rights amendments to the Constitution, the Harlem Renaissance, the growth of civil rights organizations, and the election of Barack Obama to the Presidency. This textbook-free course describes the influential role of African Americans in U.S. History. Pre-Requisites: None

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 topic will be covered for a nine-week period and 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. This class is recommended for 11th and 12th grade students. American Explorations is a textbook-free course. Pre-Requisites: None

American History

American History covers the discovery, development, and growth of the United States. The first half of the course is a survey of the struggle to build the United States of America from the colonial period to the beginning of the twentieth century. By means of reading, analyzing, and applying historical data, students come to appreciate the forces that shaped our history and character as an American people. Not only are the topics of American history discussed, but students also explore research methods and determine accurate sources of data from the past. Knowing the facts and dates of history are just the beginning: each student must understand how history affects them. The second half of American History begins with a study of American life before the 1929 Stock Market crash and how the Roaring Twenties influenced society in the late 19th through early 20th centuries. Students will examine the causes and consequences of the Great Depression and move into a detailed study of World War II with an emphasis on America’s role in the conflict. The course continues with an analysis of the Cold War struggle and America’s rise as a superpower. The Civil Rights and Women’s Rights movements, pollution and the environment, and American domestic and foreign policy will be examined. This textbook-free course concludes with a summary of current events and issues. 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. This is a College Board-approved Advanced Placement course. Pre-Requisites: Letter grade of B or higher in all previous social studies courses

Pennsylvania History

In Pennsylvania History, students explore the geography, history, culture, and government of Pennsylvania. This textbook-free course examines Pennsylvania’s role in the founding of the United States, the Civil War, and the Industrial Revolution. Students will also study the state’s significance in modern times. Pre-Requisites: None
### 1960s America

Have you ever wondered what life was like in the 1960s? This textbook-free course allows students to experience what life was like during this exciting and monumental decade. 1960s America 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 1950s Post-War boom to the 1960s Radical Movement, the Vietnam War, and civil rights. This course also focuses on many significant headlines of the 1960s, which 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 the effects of pop culture. Through this course, students look at different historical events and determine how these events impacted American citizens during this decade and afterwards. This course delivers in-depth content on the 1960s and gives each student a realistic perspective of this decade. **Pre-Requisites:** None

### Civics

Civics offers students an introduction to the foundation of the democratic government of the United States and the basic principles of the judicial system. In this course, students explore what it means to be a citizen, as well as the structure of the legislative, executive, and judicial branches of the United States government. Students also look at the characteristics of state and local governments throughout the country to examine the organization and responsibilities of these branches. In this textbook-free course, students explore the components of the American economy, including its foundations and how it interacts with other economies of the world. Additional topics addressed in this course include the party system, international relations, citizen rights and responsibilities, local governments, the function of government, the free market, and the United States Constitution. **Pre-Requisites:** None

### Economics

Basic economic theory and its impact 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. Major course topics in this textbook-free course include wealth distribution, financial markets, multinational corporations, money and banking, supply and demand, and economics and democratic development. Economics is an upper-level course suggested for grade 12 students. **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

### Cultural Explorations

Cultural Explorations will examine culturally significant time periods in World History. Each class 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. In addition to reading historical fiction, students will be introduced to the time periods by reading biographies, classic literature, and primary source documents to highlight important people and events. Students will participate in class discussions, design projects, and present their work to peers. Cultural Explorations is a textbook-free course. **Pre-Requisites:** None

### World Cultures

World Cultures explains global geography, history, and culture to students. In this course, students study the major political powers of each era and discover how the world’s earliest civilizations developed through the Age of Exploration to the Industrial Revolution. In the second half of the course, students examine a world at war, navigating the Great War, nationalist movements in Russia and Asia, World War II, the Cold War, Third World independence, and struggles for democracy. The course closes with discussions of current global issues such as terrorism, technology, economy, pollution, and renewable energy. World Cultures is a textbook-free course. **Pre-Requisites:** None
World Geography

In World Geography, students will learn the basic skills of map reading and development, geographic technology, and the recognition of geographic themes to make sense of the world. The course examines world regions including the nations, people, and cultures of each region. This textbook-free course explores the Americas, Europe, Eurasia, Central and Southwest Asia, South Asia, Africa, East Asia, and the Pacific. **Pre-Requisites:** None

World History

World History allows students to investigate significant events, people, and places from prehistoric to modern times and consider their historical relevance. In this wide-ranging course, students learn how the world and its inhabitants were shaped over time, and, in the process, gain a better understanding of the role that geography plays in world history. Topics will include the ancient world, medieval Europe, the age of exploration, the age of revolution, Imperialism, the emergence of new nations, and the modern world. World History is a textbook-free course. **Pre-Requisites:** None

Psychology

In Psychology, students explore the science of explaining and controlling human behavior. Psychology plays an integral part in everyday life because all decisions, relations, and emotions are closely tied to behavior and genetics. Within this course, students look at behavior and consider prominent psychologists who have made impressive and monumental discoveries through testing, research projects, and proving theories. Students study the anatomy of the brain to psychological disorders. This textbook-free course includes units on thinking and intelligence, sensation and perception, identity and personality, psychological methods, therapy, and social psychology. **Pre-Requisites:** None

Sociology

In Sociology, students explore the various topics and sociological terminology necessary for understanding and exploring the field. Students investigate major sociological perspectives and the famous sociologists who invented and contributed to them. Additionally, students determine how researchers perform valid and reliable sociological studies. This course is ideal for students who are interested in pursuing post-secondary careers in sociology, psychology, law, or other social sciences. Sociology is a textbook-free course. **Pre-Requisites:** None

Law

In this course, students examine citizen obligations to law enforcement, the court system, and the rules and regulations that all Americans are expected to uphold. They explore the terminology and the regulations that structure and control society. Students study different types of crime and the law enforcement powers that are put in place to regulate and diminish overall crime. Students who are interested in a law career will benefit from learning the law and justice terminology presented in this course. Major units in this textbook-free course include the powers of law enforcement, court systems, family law, criminal law, civil law, and the origins of law. Please note that this course addresses sensitive topics such as assault, drug abuse, and how those issues relate to the law. **Pre-Requisites:** None

Political Science

Political Science is an introduction to political science as an academic discipline. Students discover the origin, creation, and function of different political systems within the United States and across the globe. Students explore political theories, such as systems theory and the social contract theory. Additionally, students examine economic concepts, how countries interact with one another, international governmental organizations and nongovernmental organizations, and the role of media in politics while developing skills in research methodology. Major units in this textbook-free course include concepts of political science, political theories, systems of government, political culture, comparative politics, economics, and political methodology. **Pre-Requisites:** None
**Fine Arts**

Two credits in Fine Arts are required for graduation.

**American Music Appreciation**

Music in America has a rich history. In American Music Appreciation, students will navigate this unique combination of culture and creativity that spawned jazz, rock and roll, and hip hop. From early church music to 21st century pop, students will gain a new understanding of the key developments, people and genres in American music. Some lessons in this course may contain mature themes and subject matter.  
**Pre-Requisites:** None

**Art and Visual Culture**

In order to provide a comprehensive study of art, students in Art and Visual Culture analyze and interpret artwork created by others, examine the concepts of aesthetics and art criticism, and explore the practical application of art in a variety of careers. Art and Visual Culture, a textbook-free course, spotlights drawing as a form of communication and introduces students to the elements of art and principles of design through hands-on activities. Students sharpen their observation skills using a variety of art media. Through practice and experimentation, students become adept at using basic techniques and processes to depict the world around them and express their thoughts and feelings.  
**Pre-Requisites:** None

**Art History**

Art History, a textbook-free course, 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 including 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

**Art History I: 30,000 BCE - 1900 CE**

Interpreting the origins of art from the earliest cave paintings gives a student a unique perspective on their own work. In Art History I, students will analyze various art forms including painting, sculpture, and architecture over changing periods of time. Students will build their own cultural inventory studying the social, political, and religious movements that affect art. Art History I is intended for students who are interested in learning more about western world history, the history of visual arts, or both. This course gives students a very thorough yet comprehensible introduction to art history through the study of visual arts from Prehistoric times through 1900. Information is learned through various means including hands-on creation of original art inspired by application of information from the course. This course covers many works of fine art over the centuries. Often, great artists portrayed the male and female form in various positions and clothing. Efforts have been made to be as conservative as possible. However, some artists and their works could not be represented without allowing partial nudity or suggestive positions.  
**Pre-Requisites:** None

**Art History II: 1901 - Present**

Appreciating the cultural context of art in the modern era relies on analyzing artistic principles, abstract symbolism, and design techniques. Students in Art History II will explore the social, political, and religious trends from Post-Impressionism to street art and understand the formal and conceptual issues that foster changes in art throughout history. This course covers many works of fine art over the centuries. Often, great artists portrayed the male and female form in various positions and clothing. Efforts have been made to be as conservative as possible. However, some artists and their works could not be represented without allowing partial nudity or suggestive positions.  
**Pre-Requisites:** Art History I: 30,000 BCE - 1900 CE
**Arts and Society I: 4000 BCE - 1750CE**

Arts are not created in a vacuum. They are the result of the people and cultures that create them. Arts and Society I takes the student on a chronological walk through history, stopping along the way at a variety of historical, political, cultural, and artistic key moments. From 4000 BCE to 1750 CE, the student analyzes the relationship between the societal culture and the arts being produced. This course covers time periods during world history that are controversial and full of change. Many sensitive subjects are covered, including politics and religion. **Pre-Requisites:** None

**Delivery Mode**

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**Arts and Society II: 1751 - Present**

How do the people and the cultures of society affect the art around them? Students in Arts and Society II step into history and explore key moments from 1751 to the present in politics, culture, and art. Arts and Society enhances students’ global awareness as they learn to interpret these significant events and their impact on the arts. This course covers time periods during world history that are controversial and full of change. Many sensitive subjects are covered, including politics and religion. **Pre-Requisites:** Arts and Society I: 4000 BCE - 1750CE

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**Choreography and Choreographers**

Choreography is a statement about society, culture, and history. Students in Choreography and Choreographers will gain insight into the creative processes and will trace the work of influential choreographers from the 16th century to the present. Some lessons in this course may contain mature themes and subject matter. **Pre-Requisites:** None

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**Dance Around the World**

Throughout human history some form of dance has evolved in every world population. Students in Dance Around the World will explore dance as a ritual, a religious, and a performed art from the primitive ages through the 19th century. Historic and cultural perspectives will be examined to study those influences on the work of today’s choreographers and dancers. **Pre-Requisites:** None

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**Dance in America**

The history of American dance is complex and rich with innovation. Dance in America takes the student on a journey through the social and political climates that fostered its development. From early ballet companies to Broadway and music videos, numerous choreographers, artists, and dancers have contributed to the evolution of American dance. **Pre-Requisites:** None

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**Digital Photography**

Capturing a special moment in a photograph is powerful. In Digital Photography, students will study the history of photography as well as the basic operations of a digital camera. As they are introduced to different styles of photography and photographers, students will begin to develop their skills as well as their own voice in photography. This course is for anyone who wants a comprehensive overview of photography, beginning with photography standards and equipment. In this textbook-free course, students will explore the history of photography, photographers who influenced the field, technological advancements and their impact on the art. Students will also learn how to use a digital camera and explore the elements of lighting, composition, printing, resizing, and compiling a portfolio of work. **Pre-Requisites:** Some previous knowledge and understanding of photography or a strong desire to learn

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**Explorations in Dance I**

Grace, beauty, and the pursuit of excellence are hallmarks of ballet and modern dance companies. In Explorations in Dance I, students will study the foundations of the ballet style from clothing and training to rehearsal and performance. Students will meet the artists on stage and behind the scenes who create the magic of ballet and modern dance. This course is for those interested in exploring the world of dance as it covers basic knowledge needed to understand how dance started and how it has evolved over time. Students will gain a foundation for study in dance, choreography, or theatrical productions. **Pre-Requisites:** None

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Explorations in Dance II
The bright lights of Broadway have showcased many dancers’ talents. Students in Explorations in Dance II will be introduced to the audition process, learn about the roles of agents and unions, as well as explore some of the most exciting Broadway shows. This content is intended for students who want to expand upon what they learned in Explorations in Dance I, which covered basic dance techniques, warm-up strategies, the principles of healthy dance practices, and different dance philosophies. Explorations in Dance II expands and moves on to new dance techniques, along with the dance philosophies and innovations of notable choreographers, as well as the influence of specific Broadway shows and performances. The basics of jazz and tap dance are introduced, and the impact that dance has on musical theatre will be discussed. Pre-Requisites: Explorations in Dance I

Explorations in Film and Television
The culture of cinema and broadcast television tell a unique story of American history and innovation. Students in Explorations in Film and Television will be introduced to the technology, industry icons, and stars of the big and small screens. By studying and writing about film and television, students will analyze technological and cultural trends and understand how to be an informed viewer in the future. Pre-Requisites: None

Explorations in Media Arts
From television to video games, media is everywhere. In Explorations in Media Arts, students will study the art behind the media, how it is created, the history of media, and the legal and ethical issues that arise while creating media arts. Students will apply critical thinking skills to creating web, video, animation, and graphic media projects. Pre-Requisites: None

Explorations in Music I
Music can be simple, yet so complex. Students in Explorations in Music I study the basics of music, instrument families, music notation, and organization. By analyzing the ways music is connected to other disciplines and industries as well as training on basic terminology, students will progress in their understanding of music. Pre-Requisites: Ability to read music

Explorations in Music II
How do you understand the music of a symphony or recognize a song from Japan? In Explorations in Music II, students will study the different forms of music and their instrumentations. Students are introduced to music from around the world and given a comprehensive overview of Western music from ancient times to the present including art, folk, and popular genres. Students will be able to identify instruments and music from different cultures and different genres. This course is intended to help students become well-rounded musicians and listeners. Pre-Requisites: Ability to read music; Explorations in Music I

Explorations in Music
In Explorations in Music, students will discuss what music is, why we listen to music, and how music affects us. Students will study the basic elements of music, instrument families, active and passive listening, and how to read notes and rhythms. The forms and textures of different musical ensembles will also be examined. Students will learn about the development of different musical styles over the course of music history through exploration of different time periods and composers of music. The connections between music and other fields, such as math, politics, dance, theatre, science, will also be discussed. By analyzing the ways music is connected to other disciplines and industries as well as learning basic terminology, students will progress in their understanding of music. Lastly, we will take a look at the different careers in music. This textbook-free course is an introductory level course. Pre-Requisites: None
Explorations in Theatre I

It’s enjoyable to watch a well-done performance. Explorations in Theatre I helps the student understand the effort that goes into that performance. Through the perspective of the performer, the playwright, and the director, students will gain an appreciation of the artists who have contributed to both musical and non-musical performances and an understanding of the world of the actor. Major topics of study in the course include the lives and works of great playwrights such as William Shakespeare and Arthur Miller, major theatrical works and their ties to culture and humanity, the process of scriptwriting and revision, and the roles and duties of individuals in a theatrical production. Students will also have the opportunity to write, revise, and analyze a script. This course is intended to be introductory. **Pre-Requisites:** None

Explorations in Theatre II

Behind the actor are dozens of artists enhancing that performance. Students in Explorations in Theatre II will build a vocabulary of the people and the equipment that work behind the scenes in the theater. This is a course for those who are interested in gaining further knowledge of all the technical aspects of theatre. Understanding the business aspects of producing a performance as well as the artistic considerations in technical production enhances future audience members’ appreciation for the theatre. Major topics of study in the course include sounds and light editing; the roles of production and stage managers; the dramaturge; costume, hair, and makeup design; set design; and prop construction. The course concludes with the student writing a script that incorporates all technical components of theatre. **Pre-Requisites:** Explorations in Theatre I

Exploring Cinema

Exploring Cinema, a textbook-free course, introduces students to filmmaking and cinematic productions. The course explores the technology used to create a film and begins to build an aesthetic appreciation of films for the student. Students also are exposed to media art and the ethics of media creation to give a wider perspective on the different ways material is presented. **Pre-Requisites:** None

Fashion Design

Fashion Design is an advanced course for students interested in learning the intricate process of how the fashion system works. Students will study the fashion business in sequential order from concept to consumer. They will examine all of the processes involved in the industry from producing raw materials, apparel, and accessories to the retail stores that sell fashion merchandise to the public. Students learn that the decision-making process is complex and not just about the latest designers, styles, or trends of an era. In this course, students will explore the history of fashion, including the looks and creations of every era. They will discover the equipment, tools, and fabrics used to create fashion, and they will learn how technology is used in fashion. Students have an opportunity to express themselves and their style through the creation of their own fashion design sketches and mood boards. In this textbook-free course, students will learn fashion terminology and how to forecast new and upcoming fashion trends. **Pre-Requisites:** None

Graphic Design

Graphic Design is a textbook-free course that 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 Dance**

What inspires choreographers and dancers? Students in Introduction to Dance will study the main elements of dance: space, time, and energy. They will discover how a choreographer uses these elements to create a dance piece, and explore how dancers respond with their own creativity. This course is intended for students who are interested in dance, but may also be wondering if it’s the art form “for them.” Introduction to Dance looks over many topics relating to dance, including several famous choreographers, common and popular dance forms historically and in modern times, as well as different kinds of dance techniques, and stage effects. This course will teach students many of the basic steps of dance and give them opportunities to try it out for themselves. **Pre-Requisites:** None

**Music Appreciation**

Music Appreciation exposes students to a large variety of music. Students will be able to explain personal music preference, and identify how music is impacted by technology, social values, and daily life of the composers. Students develop an understanding of the composer’s intent and the ability to rationalize personal interpretation of music works. Similarities and contrasts in music throughout the eras are identified as well as how previous compositions impact future compositions. In this intermediate-level textbook-free course, students will study music from the Medieval, Renaissance, Baroque, Classical, and Romantic Eras. They will also explore 20th century and contemporary music and its impact. **Pre-Requisites:** None

**Music Around the World**

There is a vibrant chord of music that runs through every culture in the world. Students in Music Around the World will explore the music of Africa, Asia, Europe, and the Americas. From Finland to Mongolia to Zimbabwe, students will study the impact a country’s history and societal values have on the music of that nation. This course studies the various musics throughout the world, the culture that impacted them to be, and their impacts on other cultures, all while touching on the geography of the regions and the instruments used. **Pre-Requisites:** None
Music Theory I

Learn to understand the beautiful language of music! In Music Theory I, students will learn the “alphabet” that makes up music, including music notation. How to read music and to follow the structure, including pitch, rhythm, harmony, scales, keys, and chords, empowers any avid music listener or future musician is the cornerstone of this course. The study of music theory will help any musician improve as a player, as a thinking and understanding musician and listener. The ability to understand and reflect upon what one is playing and listening to is invaluable. This course also begins to develop students’ musical ear. This advanced-level course covers higher-level concepts and would be appropriate for students who are more serious about their music study. **Pre-Requisites:** Explorations in Music I or previous music study or a strong desire to learn

Music Theory II

In Music Theory II, students will elevate music comprehension by understanding the concepts and rules of creating music. Music Theory II is both theoretical and practical, and encompasses advanced harmonic and rhythmic structures, instrumentations, and key changes. Through sight and sound, students will deepen their appreciation of music with a grasp of music theory. The study of music theory will help any musician improve as a player, as a thinking and understanding musician and listener. The ability to understand and reflect upon what one is playing and listening to is invaluable. This course also begins to develop students’ musical ear. This advanced-level class particularly focuses on harmonic function and analysis. **Pre-Requisites:** Music Theory I

Photo Manipulation

Manipulating and altering an image to create a new work allows for a new interpretation. By using advanced software tools, including Photoshop, students in Photo Manipulation will learn strategies for creating complex imagery. Students will acknowledge the principles of design, editing and repairing still images or creating unique new concepts in their art. Photo manipulation skills are a basic requirement for many careers in art, advertising, media, advocacy, education and design-just to name a few. This course not only prepares the students to be competitive in the technological skills required for contemporary art, photography and design; it also gives them basic frameworks for design, editing and composition. Students will become familiar with the field and with the options available to them. **Pre-Requisites:** None

Photojournalism

A powerful image can tell an eloquent story without any words. Students in Photojournalism will meet some of the pioneers who set the standards for this unique way of storytelling. As they study the principal types of photojournalism and the ethical responsibilities a photojournalist has behind the lens, students will develop their own storytelling skills through their writing and their photographs. This course is designed for students interested in photography and photojournalism, including those who intend to pursue a career in photojournalism. **Pre-Requisites:** None

Studio Arts I: Techniques and Tools

Creativity flourishes with the right foundation. In Studio Arts I, the student artist will lay the groundwork for their art by practicing unique exercises to develop drawing, painting, and mixed media skills. Incorporating their knowledge of composition, design, colors, and forms, students will use the appropriate materials and tools to work from realism to abstract. This course is for students beginning a serious study of studio art techniques. A foundation of knowledge and skills will help students grow as artists while building a foundation for further study. **Pre-Requisites:** None

Studio Arts II: Concepts and Expressions

Developing a unique personal style and creating complex imagery is possible for any artist. Students in Studio Arts II will engage in techniques that take their work to a more sophisticated level. Analyzing other artists and their works will help the student artist find deeper meaning and new interpretations to create a cohesive result. **Pre-Requisites:** Studio Arts I: Techniques and Tools
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 roll 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

The World of STEAM

Each aspect of the arts relies on science and technology. The arts, science, and technology are intertwined, now more than ever. In The World of STEAM, students will learn why the eye sees color, how a dancer uses gravity, and what makes a sound wave travel. Understanding the science behind the arts will elevate students to a new level of creativity. Pre-Requisites: None

Theatre

Theatre invites students to explore the history of theatre and the basic elements of stage production. This textbook-free course highlights the technology used to create early and modern stage productions and the basic fundamentals of acting. Theatre provides students with a look at production elements such as stage lighting, sound, costume, and makeup. Students learn to apply voice and gesture skills in pantomimed and improvised scenarios, and they receive an overview of the responsibilities of the producer, director, and technical crew of a theatre production. Students develop insight to the motivations of a playwright in the development of a story, and they explore the careers and works of famous playwrights. Theatre provides a balanced educational experience for all students so that they can gain the inquiry and critical skills involved in clarifying theatrical perceptions and knowledge. Pre-Requisites: None

World Languages

3.5 credits in electives are required for graduation. World Languages can count toward elective and/or fine arts credit. Please note that many colleges and universities require students to take a minimum of two years of the same foreign language for admittance.

American Sign Language I

In American Sign Language (ASL) I, students will gain a foundation of ASL and of deaf culture. The ASL alphabet, numbers, basic vocabulary, and grammar will be covered over the course of the year. Lesson topics include greetings, introducing yourself, identifying people, exchanging personal information, discussing living situations, talking about families, and talking about activities. Students will have a fundamental understanding of ASL reception and production skills. Lessons will also include how to use non-manual markers to indicate different types of sentences and questions. Pre-Requisites: None

American Sign Language II

In American Sign Language (ASL) II, students will build on what they have learned in American Sign Language I. Students will expand their language skills to communicate in a wider array of situations, to further develop their language fluency and to advance their level of comprehension of ASL. Vocabulary and key grammar structures will be introduced using dialogues and narratives that are culturally appropriate. Various number types, expanded fingerspelling practice, space and semantic use of agreement or spatial verbs, and use of negation signs will be covered. Culture lessons will focus on behaviors and knowledge that enable students to act in appropriate linguistic and social ways and to gain more cultural insight into the deaf community. Pre-Requisites: American Sign Language I
### American Sign Language III

In American Sign Language (ASL) III, students will expand upon their vocabulary foundations by applying what they have previously learned to develop deeper understanding and mastery of ASL grammar and syntax. In this course, students will gain increased command of the language through study and application of meaningful and appropriate communication in ASL. The course will cover use of classifiers, number integration into signs, verb modification, how verb conjugation is handled in ASL, new vocabulary, expanded application of spatial agreement in signing, and important cultural components of the Deaf Community. Storytelling and narrating personal experiences are a large focus of this course to integrate ASL skills. Some minor ASL interpreting concepts will also be introduced at various times throughout the lessons in the course. **Pre-Requisites:** American Sign Language I, American Sign Language II

### French I

French I is an introductory course designed for students who have little or no previous knowledge of the French language and culture. This course will allow students to acquire the tools necessary for communication and comprehension of the French language. Students explore the global francophone community, and they compare these different cultures to each other and to their own. This course primes students’ fluency through various types of communications. The asynchronous version of French I is a textbook-free course. **Pre-Requisites:** None

### French II

In French II, students have the opportunity to review some of the structures from French I, but they also build their knowledge of the basic and intermediate French concepts. Students review the present tense of regular and irregular verbs, the passé composé with avoir and être, and adjective agreement and placement. Students examine grammatical forms and are challenged to progress in their basic knowledge and speaking capabilities. The asynchronous version of French II is a textbook-free course. **Pre-Requisites:** French I

### French III

In French III, students continue their study of the French language and popular French culture. They use larger vocabulary terms and explore a variety of literary texts that include the structures and vocabulary that they are learning. In this course, students study vocabulary, grammar, and culture in context through authentic literary and journalistic texts, putting these items into practice through written and spoken tasks. The asynchronous version of French III is a textbook-free course. **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, and 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 Language and Culture

AP French Language and Culture is an accelerated course designed for students who already possess comprehensive knowledge of the French language, as the course’s instruction is entirely in French. In this course, students explore issues within a Francophone framework. Students consider identity, family, community, and contemporary life in a Francophone context through literary texts, newspaper and magazine readings, and audiovisual resources. Students reflect and elaborate on these concepts while making comparisons to their culture of origin through written and oral activities. Grammar reviews and introduction to new vocabulary primes the learner for successful completion of communicative tasks. This course is a College Board-approved Advanced Placement course. **Pre-Requisites:** French I; French II; French III
**German I**

In German I, students are introduced to the basic and fundamental skills necessary for expressing common ideas in the German language. They learn to state daily activities and how to have an introductory conversation. These concepts build in theme and scope, allowing students to explore topics including daily activities, travel, needs, desires, and preferences in typical and increasingly complex situations. The course provides a realistic context in which students can practice their newly acquired skills. German I 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. German I is a textbook-free course.  
*Pre-Requisites: None*

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**German II**

German II provides students with a comprehensive introduction to nouns and verbs and previously learned concepts. Students examine the case systems extensively, and focus on verbs throughout this course. They learn different types of verbs and their conjugations in different grammatical tenses such as present, future, past simple, and present perfect. Students practice one of the most challenging aspects of German grammar — verbs with accusative, dative, and genitive prepositions — thoroughly. Students learn a large number of new vocabulary words and idioms to assist in their continual development of language. German II is a textbook-free course.  
*Pre-Requisites: German I*

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**German III**

In German III, students continue their study of the German language and popular German culture. Students use larger vocabulary terms and explore a variety of literary texts that include the structures and vocabulary that they are learning. In this course, students study vocabulary, grammar, and culture in context through authentic literary and journalistic texts, putting these items into practice through written and spoken tasks. German III is a textbook-free course.  
*Pre-Requisites: German I; German II*

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**Mandarin Chinese I**

Mandarin Chinese is an introductory course to modern Standard Chinese, which includes the spoken language Mandarin and the written language of simplified characters. In addition to learning about Chinese culture, students learn the basics of Chinese pronunciation through a beginner’s vocabulary of Chinese characters using scenario-based examples. In this textbook-free course, students get a glimpse of Chinese tradition and society through cultural tips. As the course progresses, students will explore rhetoric, reading and writing, personal applications, and phonetics. Students have the opportunity to learn about Chinese traditions, sports, employment, and shopping. Other topics include places in China, cultural comparisons, and cultural influence.  
*Pre-Requisites: None*

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**Mandarin Chinese II**

Mandarin Chinese II is an intermediate-level course in which learners will continue to develop communication skills through listening, reading, speaking and writing in the target language. The course presents modern Standard Chinese, Mandarin, as the spoken language and simplified characters as the written language. Students will recognize and apply vocabulary in Pinyin and Chinese characters in the context of common scenarios. Students will practice hand writing Chinese characters in complete sentences. Students will continue learning about Chinese tradition, language and society to become more familiar with Chinese language and culture. In this textbook-free course, students will learn about careers and work, nature, environment, travel, activities, and movies.  
*Pre-Requisites: Mandarin Chinese I*

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**Spanish I**

Spanish I provides students with a strong foundation of the Spanish language and its cultural influences. From pronunciation to basic grammar and practical vocabulary, students gain a fundamental understanding of written and conversational Spanish. Students practice pronunciation sounds, greetings and introductions, questions, and present-tense verb conjugation. Students learn how to describe people, school, and pastime activities in addition to likes and dislikes. Spanish I presents information in a fun, interesting format that promotes learning and draws a link between the classroom and real-world situations. The asynchronous version of Spanish I is a textbook-free course.  
*Pre-Requisites: None*

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**PA Cyber | Course Catalog**
Spanish II

Spanish II introduces complex grammatical components, such as reflexive verbs and the present progressive, preterite, and imperfect tenses, along with idiomatic expressions unique to the Spanish language. Building on an ever-growing lexicon, students incorporate concepts to form questions, express preferences and possession, discuss the past, and describe and compare people, places, and locations. Spanish II continues to build a foundation for students in their pursuit to learn and master the Spanish language. The asynchronous version of Spanish II is a textbook-free course. **Pre-Requisites:** Spanish I

Spanish III

In Spanish III, students acquire a more extensive topical vocabulary while gaining a higher understanding of complex grammatical structures, verb applications, and idiomatic expressions. This course allows students to increase their reading and listening comprehension as well as their fluency in speaking and writing in Spanish. Students describe, analyze, summarize, and explain ideas verbally and in writing using the Spanish language. The asynchronous version of Spanish III is a textbook-free course. **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 Language and Culture
AP Spanish Language and Culture 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 is a College Board-approved Advanced Placement course.

Pre-Requisites: Spanish I; Spanish II; Spanish III

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

Health
In Health, students discover how to make conscientious decisions when attempting to improve their overall health and wellness. From healthy lifestyles, diets, and exercise to responsibilities within individual families and larger communities, topics within the discipline of health are pertinent and applicable to all students. Throughout the course, students review concepts that promote safe, healthy, and active lifestyles. Major topics of study in this course include noncommunicable diseases, decision making, nutrition, communication, peer and family relationships, health services, and emotions. Health is a textbook-free 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, students in grades 9-12 are required 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. Looking to have a little more fun in Physical Education? Students in grades 9-12 have the option to take Physical Education with a live instructor one day a week. Students can record this hour on their Physical Education log towards the completion of the 72 hour requirement.

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 textbook-free course encompasses a variety of topics with a focus on nutrition and physical fitness. Subjects covered in this course include basic nutrition principles, the digestive system, practicing nutrition, dietary guidelines, label reading, and food safety. 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, Career Readiness, Multimedia, Technology, and General Electives can count toward these credits.

Accounting
In this semester course, students will explore accounting, including investigating accounting careers. They will learn basic accounting skills and procedures both with and without a computer for general journals, general ledgers, cash payments journals, cash receipts journals, sales journals, accounts payable ledgers, and accounts receivable ledgers. In this textbook-free course, students will also learn how to reconcile a bank statement and to prepare payroll records. This course covers the basic principles of financial accounting for individuals and for companies with attention to both the mathematical formulas and to the ethical side of accounting. Each unit has practical exercises including a project at the end of the unit. Pre-Requisites: None

Advertising
Throughout Advertising, students discover various ways that advertising touches their lives. Students learn to identify what customers need and want so that various companies are able to advertise and sell a variety of products and services. Students will learn to identify customers’ desires and discover what is needed to create, advertise, and sell products to fit these needs. This textbook-free course guides students to develop the skills they need as consumers and advertisers. Some of the course topics include building client relationships, advertising strategies, types of media, purchasing media, and creating a complete advertising plan. Advertising provides a solid foundation for those students contemplating careers in marketing, advertising, or other business-related fields. Pre-Requisites: None

Business Applications
In Business Applications, students focus on business software and the corresponding skills required in the business world. The course begins with an overview of computers, including hardware, software, and operating systems. Students explore spreadsheet, word processing, presentation, and database software and discover how to fulfill a customer request using these skills. They also study web-based applications and additional software packages and learn about Internet technology. Students investigate common security concerns and discover how to prevent security issues. Finally, students experience the software development cycle where they learn how various professionals utilize business applications. They discover the importance of moral and ethical responsibility in an online community. Students must possess basic spreadsheet, word processing, and presentation software skills before entering this course. Additionally, students must be independent learners, and they must be comfortable learning new technology and researching software features and functions. Business Applications is a textbook-free course. Pre-Requisites: Basic spreadsheet, word processing, and presentation software skills (i.e. Microsoft Office Suite)

Business Management
Business Management guides students through examples of their roles as wage earners, consumers, and citizens as they explore the wide, exciting world of business. Students examine topics ranging from extensive credit use to the role of government in the U.S. economy. Students are encouraged to take Introduction to Business as a prerequisite to Business Management, as Business Management dives deeper into the different aspects of managing a business successfully. This course is textbook-free. Pre-Requisites: Introduction to Business

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
### Introduction to Business

In this textbook-free 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. Introduction to Business is a textbook-free course. **Pre-Requisites:** None

### Marketing

In this textbook-free course, students discover the various ways marketing, and consequently, advertising impact their lives. Marketing is geared toward introducing students to the study and implementation of market analysis, which focuses on the identification and fulfillment of customer needs. This course provides a solid foundation for students contemplating careers in marketing, advertising, or other business-related and commercial fields. **Pre-Requisites:** None

### Money Management

Money Management, a textbook-free course, 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

### Career Readiness Electives

#### Career Forward 11

Career Forward 11 provides students with a solid foundation for a successful post-secondary future. The course will focus on career awareness and preparation, career acquisition, career retention and advancement, as well as personal finance and entrepreneurship. Students will begin the course by exploring their abilities, aptitudes, and interests. Career Forward 11 uses the Career Cruising online program to provide students with a variety of activities and the ability to learn more about the careers that interest them. This knowledge will assist students in creating a career path and a career plan that will be aligned to their personal interests and skills. Practical items such as resumes, cover letters, and interviewing skills will be addressed. Personal budgeting and financial literacy are an important part of the course. Students will also learn how to increase skills in practical areas such as teamwork, media literacy, internet literacy, and decision making. Whether students plan to seek a two-year degree, four-year degree, a military career, or employment, Career Forward 11 will provide all students information and practical advice for achieving those goals. Career Forward 11 is a required course for graduation. **Pre-Requisites:** None

#### Career Exploration in Dentistry

This course introduces students to the exciting and varied career opportunities in the dentistry profession, from dental assistant all the way up through oral surgeon. Students will review the history of dentistry globally and in the United States and will learn key dental terminology. The course will introduce the roles and tasks of the profession as well as the skills and education required of nearly every member of the dental staff. Students will gain an understanding of what it takes to perform each position and how they work together. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

#### Career Exploration in Finance

This course introduces students to the challenging world of finance and provides information about finance careers. Students will review key financial terms and examine various groups, positions, and roles within financial institutions. Resumes, interviews, and networking will also be introduced. Students will also discuss ethics on Wall Street and the role of finance within society. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** Algebra I
Career Exploration in Healthcare
This course introduces students to the exciting and varied future career opportunities in the healthcare industry that will be in demand. The course will introduce the roles and tasks, identify education and skills needed, identify responsibilities of roles which support or supervise their role, analyze legal and ethical responsibilities, limitations, and implications for each of these professions. Healthcare roles explored in this course include physicians, physician assistants, pharmacists, physical therapists, healthcare information technology managers, occupational therapist, technicians, dentists, paramedics, and nurses. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

Construction Fundamentals and Careers
This course introduces students to some of the foundational elements of home construction and then does a deep dive into careers, technology, and the future of construction. It also addresses some of the academic proficiencies that different careers in the field of construction will need to have. Later in the course, specific careers, career outlooks, and specialized education and training requirements will be covered. Students will discover the varied roles within the field as well as what it takes to own a construction company. Finally, the course delves into green construction and where the future of construction is headed. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

Explorations in Arts Careers
For every Broadway dancer, every television star, every pop singer, there are countless people behind the scenes helping to make it happen. Explorations in Arts Careers introduces students to the skills that are part of the many fascinating careers in the arts. This course focuses on all types of art forms such as music, dance, visual arts, film, and theatre. Studying the arts creates independent and innovative thinkers and many doors are open to an artist with the proper training. This course should be taken for those considering a career in the arts, and is intended for students who may want to pursue an arts major in college or who may want to pursue an artistic career path. **Pre-Requisites:** None

Introduction to Education and Teaching
This course is designed to prepare future educators for the classroom they may inherit! The course starts with a history of education and the blended, adaptive, and personalized learning opportunities that are coming to the forefront in teaching and learning. It then explores new and emerging technologies, along with their current and future impact on education. Throughout the course, students will explore a wide range of career possibilities in the education field and evaluate both the promises and pitfalls of technology in education. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

Robotics: Applications and Careers
This course on robotics teaches students what a robot is and how it relates to other key technologies such as artificial intelligence and machine learning. The course then examines 10 applications of robots and how they will change and impact various aspects of our lives and the economy. Will robots simply steal our jobs, or will they be a tool that will create new opportunities and even free humans to use our creativity and curiosity to their full potential? Students will grapple with this and many other questions as they explore this vital, future-focused subject. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None
**Career and Industry-Based Electives**

**Carpentry**
This course provides students with an understanding of carpentry. Students will engage in interactive videos designed to teach how to use basic measuring tools, hand tools, and machines commonly used in the field of carpentry. Additionally, students will examine various wood construction materials and their properties. Throughout the course, students will learn components of site and personal safety, and how to interpret detailed drawings used for construction. **Pre-Requisites:** None

**Criminal Justice**
This course provides students with an overview of the criminal justice system. In the Criminal Justice course, students engage in interactive videos designed to test their visual memory and the ability to apply their skills to effectively manage a crime scene. Students will become immersed in topics that include criminal and constitutional law, security, and communications. Students will review basic law enforcement skills, which includes tactics, methods, and other skills utilized by law enforcement. **Pre-Requisites:** None

**Culinary Arts**
This course provides students with an overview of basic fundamentals and standard practices of the culinary arts. In this course, students will learn culinary techniques and the recognition, selection, and proper use of tools and equipment. Students will learn how to identify and prepare a variety of foods and recipes, as well as master conversions through the use of proper scaling and measurement techniques. Using video-based simulations, students will prepare standard recipes while effectively managing time, accurately measuring ingredients, and appropriately using kitchen equipment. Food safety and sanitation techniques will also be an important part of this course. **Pre-Requisites:** None

**Medical Assistant**
This course is designed to prepare students with the knowledge and skills to assess, plan, provide, and evaluate care for patients in a variety of healthcare settings. Students will engage with interactive videos to learn first aid principles, diagnostic testing, and laboratory procedures. Emphasis will be placed on safety, medical law, and medical interventions. This course is designed to provide students with a competitive edge for entry into the healthcare marketplace. **Pre-Requisites:** None

**Nursing Assistant**
This course is designed to prepare students with knowledge of basic nursing assistant skills which are necessary to assess, plan, provide, and evaluate the care of patients in various healthcare settings. Students will engage with interactive videos while learning about infection control, personal care skills, mental health needs, and legal responsibilities. Additional information on standard vital signs, identifying body parts, wheelchair assistance and ambulation, and the care of patients is also provided. This course is designed to provide students with a competitive edge for entry into the healthcare global marketplace. This course is best suited for students in grades 11 and 12. **Pre-Requisites:** None

**Drones**
In this course, students will engage with interactive videos designed to teach students the skills and qualities of a drone pilot. Students will learn how weather affects the drone and will develop an understanding of the physics involved with flying. Students will be immersed in topics that include emergency procedures, preflight inspection, radio communication, VLOS operations, sectional charts, aerial photography, and search and rescue operations. **Pre-Requisites:** None
Multimedia & Technology Electives

Adobe Illustrator

This course provides an introduction to Adobe Illustrator. Students will learn everything from basics like navigating Illustrator to performing complex tasks such as managing colors, drawing, creating illustrations, and much more. Students will gain insight into what it is like working in the graphic design industry in this course. The course contains guided video tutorials, hands-on projects, and step-by-step resources that help students learn how to work in Illustrator. **Pre-Requisites:** None

Adobe InDesign

This course introduces students to the world of Adobe InDesign. Through the course, students will learn everything from basics like navigating InDesign to performing complex tasks such as creating page layouts, applying interesting effects, and making documents interactive. Students will gain insight into what it is like working in the digital media and print design industry in this course. The course contains guided tutorials, do-it-yourself projects, and other resources that will help students practice and learn how to work in InDesign. **Pre-Requisites:** None

Adobe Photoshop

This course introduces students to the world of Adobe Photoshop. Through the course, students will learn everything from basics like navigating Photoshop to performing complex tasks such as editing and retouching photos, applying filters and effects, and creating original artwork. Students will gain insight into what it is like working in the visual and graphic design industry in this course. The course contains guided tutorials, do-it-yourself projects, and other resources that will help students practice and learn how to work in Photoshop. **Pre-Requisites:** None

Basic Web Design

In this course, students will learn how to design a beautiful and functional website. Students will learn how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programing languages. HTML5 and CSS3 will be the standard versions used in the class. Students will understand design components of websites, including the use of color, layout and when to use different techniques, typography rules, and the importance of imagery. Upon completion of this course, each student will have hands-on experience creating a fully functioning website. Students do not need to have a previous technical background with HTML or CSS prior to taking this course. Basic Web Design is a textbook-free course. **Pre-Requisites:** Ability to navigate the internet, use email, and use word processing software (i.e. Microsoft Word)

Cloud Technologies and the Internet of Things

First, we had the internet of computers. Then, with the advent of email and social media, along with mobile technology, it became the internet of people. Today’s world is increasingly becoming the internet of things. With advances in battery power, sensors, and computer chips, more and more devices are being connected to the internet. This will allow these devices to be monitored, controlled, and used more effectively for people and businesses. This course will examine the trends and opportunities surrounding the Internet of Things. Students will learn about the technologies, hardware, and software that underpin the Internet of Things. A variety of end-market applications in our homes, businesses, and cities will be explored. Finally, students will learn about the many career opportunities that the Internet of Things will enable. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

Computer Basics

In this course, students will learn how to use productivity and collaboration tools, such as G Suite by Google Cloud to create word processing documents, spreadsheets, surveys, and forms such as personal budgets and invitations. Computer Basics is a textbook-free course. **Pre-Requisites:** None
Introduction to Artificial Intelligence

This course teaches what every student should know about Artificial Intelligence. AI is a fast-moving technology with impacts and implications for both our individual lives and society as a whole. In this course, students will gain a basic introduction to the building blocks and components of artificial intelligence, learning about concepts like algorithms, machine learning, and neural networks. Students will also explore how AI is already being used, and evaluate problem areas of AI, such as bias. The course also contains a balanced look at the impact of Artificial Intelligence on existing jobs, as well as its potential to create new and exciting career fields in the future. Students will leave the course with a solid understanding of what AI is, how it works, areas of caution, and what they can do with technology. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. Pre-Requisites: None

Introduction to Computer Science

Introduction to Computer Science is a starting point for any student interested in computer related skills and careers. This course will introduce students to an overview of computers, operating systems, networks, cyber security, and the Internet. Students will also have the opportunity to explore careers in computer related fields and how computers affect everyday life. Pre-Requisites: None

Intro to Java Programming

Java is one of the most widely used computer languages in the world. This course will teach students Java by having them complete multiple projects, both in the console and user interface, including: mad libs, player vs computer games, battleship, tic tac toe, picture shuffler, and many more. This textbook-free course is meant to give students ample experience in Java by creating multiple stand alone programs. Pre-Requisites: Previous coding experience in any computer language including: JavaScript, Python, C#, C++, Ruby or any other object oriented computer language is strongly recommended.

JavaScript Game Design

JavaScript is one of the best computing languages to learn because it makes web browsers come alive! This course will teach students JavaScript through coding multiple computer games including pong, fish, a platformer, and tower defense! They will then code or customize their own game. Students will write all the code themselves by working through individual lessons and by watching video reviews They will learn about variable, functions, listening events, loops, arrays, and objects. This course assumes no coding experience and includes self-graded quizzes and tests. Students will also upload their work at the conclusion of each project to create an online portfolio. Pre-Requisites: Ability to navigate the internet, use email, and use word processing software (i.e., Microsoft Word)

Python Multiplayer Adventure

Python is a powerful language designed to do just about anything! This course allows students to learn Python by first completing a text based console game and then turning it into a multiplayer adventure! Students will not only learn Python from going through the individual lessons and video reviews but also understand a client server relationship. They will get to code in their own Python web server that allows connections through a browser. Students will gain experience using variables, classes, functions, lists, dictionaries, generators, and proper Python formatting. This is a great course for anyone interested in preparing themselves for future coding classes. This textbook-free course assumes no coding experience. Pre-Requisites: None

Python Programming

Learn the Python programming language and develop your problem solving skills! This course covers the fundamentals of programming and algorithmic thinking, including topics such as variables, loops, conditionals, methods, and functions. Students build numerous projects throughout the year, including text-based games and drawings made with code. Coding can be a fun and rewarding experience that helps students discover if computer programming is the career path for them. Pre-Requisites: None
## Wearable Technology Innovations
From hearing aids to pedometers to smart watches, humans have made and worn devices to overcome physical deficiencies, count their steps, and communicate. With the continued miniaturization of chips and sensors, combined with increasing sophistication of artificial intelligence, wearable technology has proliferated into countless end-markets. This course will introduce students to wearable technologies and the components and software that make these technologies possible. The course will also evaluate several applications of wearable technologies in various industries. Finally, the course will examine and discuss the implications of wearable technology, including its pros and cons, and potential implications to our health, privacy, and society. This course involves interactive online lessons, projects, short-answer assignments, and personal reflection activities. **Pre-Requisites:** None

## Web Design
Web design allows students to learn how websites are designed and created, from planning to publishing. Course content will include basic web programming languages, such as HTML and CSS. Students will also learn web file management. **Pre-Requisites:** None

## General Electives

### Character Education
This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement as students and experience more success and satisfaction as adults. Character Education is a textbook-free course. **Pre-Requisites:** None

### Child Development
This course is designed to help prepare students for their responsibilities as parents and caregivers of children. Topics include prenatal care, growth and development through age six, teen pregnancy, maternal health, parenting skills, and child guidance. Child Development is a textbook-free course. **Pre-Requisites:** None

### Communications
In Communications, students explore various aspects of communication. They will investigate the foundations of communication by analyzing, applying, and designing creative works essential to the professional communications industry. This textbook-free course establishes a comprehensive foundation for students interested in a post-secondary career in communications. **Pre-Requisites:** None

### Family and Consumer Science
Family and Consumer Sciences, a textbook-free course, 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
### Human Development and Family Studies

Students in the Human Development and Family Studies course explore the basic information about human development, parenting roles and strategies, and functioning effectively within the family in today’s changing and complex society. This textbook-free course helps students to develop competencies related to genetics, family types, and effective communication. Students investigate the ways in which humans develop over their lifespan, human relationships, child care, and child abuse. Students also learn the importance of creating a nurturing and caring home environment. **Pre-Requisites:** None

### Life Skills

As students grow and become adult citizens, they are expected to understand basic life skills to live independent and successful lives. Life Skills, a textbook-free course, is designed to provide students with the information that they need as they begin the adulthood phase of their lives. From personal finance to nutrition to personal development, students have the opportunity to learn useful skills, helping them to become responsible and proactive young adults. **Pre-Requisites:** None

### Media Writing

For students who are interested in majoring in broadcast journalism, communications, or any other form of media in college, Media Writing is the ideal course. Media Writing is a textbook-free course wherein students explore the basics of media writing and reporting. Students are exposed to numerous styles of writing, including social media reviewing, analysis, public service announcements, and writing for publication. In addition, students become familiar with researching and locating sources that are reliable and valid. In addition, students will explore persuasive media and media rhetoric. They will also participate in the review of movies, social media, news stories, and magazine articles. **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 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

### Study Skills and Strategies

The Study Skills and Strategies course equips students with the skills and understanding critical to effective learning. Using a unique approach to the traditional topic of study skills, this course weaves understanding regarding the role of the brain in learning into the instruction of discrete learning skills and strategies. Moving beyond a list of good tips and ideas, the Study Skills and Strategies course will challenge students to develop intentional approaches to learning. They will be required to make connections between the strategies and skills they learn in this course and the implementation of those strategies and skills in their other coursework. Upon completion of the course, students will have learned a variety of specific learning skills and strategies, gained greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans for any academic course or other learning needs. Study Skills and Strategies is a textbook-free course. **Pre-Requisites:** None
Keystone Courses

Keystone Algebra I

Keystone Algebra I is a textbook-free course 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 Keystone Assessment Anchors as defined by the eligible tested content. Throughout this elective 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. **Pre-Requisites:** Algebra I

Keystone Algebra I

This asynchronous course is designed to provide focused content remediation for students who have not yet met proficiency on the Algebra I Keystone Exam. Prior to the start of the course, students will take a pre-test. After completing the pre-test, students may test out of content that they have mastered. Course content will adapt to the individual student, and will focus specifically on the topics in which they need further practice. In Keystone Algebra I, students will develop computational, procedural, and problem solving skills through the course, building a solid foundation for further study in mathematics. This is a textbook-free course. **Pre-Requisites:** Algebra I

Keystone Biology

Keystone 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 this textbook free course was created to align with the Keystone Assessment Anchors as defined by the eligible tested content. Throughout this elective 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. **Pre-Requisites:** Biology

Keystone Biology

This asynchronous course is designed to provide focused content remediation for students who have not yet met proficiency on the Biology Keystone Exam. Prior to the start of the course, students will take a pre-test. After completing the pre-test, students may test out of content that they have mastered. Course content will adapt to the individual student, and will focus specifically on the topics in which they need further practice. In Keystone Biology, students will focus on scientific inquiry to investigate real-world phenomena. This textbook-free course outlines the chemical basis of life, the concept of cell structure and function, and the basics of Mendelian genetics. Students also analyze the structure of DNA and the role of biotechnology today. Students examine the theory of evolution, ecology, interactions that occur within ecosystems, and the ways in which humans have impacted ecosystems. **Pre-Requisites:** Biology

Keystone English Literature

Keystone 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 this textbook free course was created to align with the Keystone Assessment Anchors as defined by the eligible tested content. Throughout this elective 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. **Pre-Requisites:** English 9; English 10

Keystone English Literature

This asynchronous course is designed to provide focused content remediation for students who have not yet met proficiency on the English Literature Keystone Exam. Prior to the start of the course, students will take a pre-test. After completing the pre-test, students may test out of content that they have mastered. Course content will adapt to the individual student, and will focus specifically on the topics in which they need further practice. In Keystone English Literature, students will focus on a variety of skills needed to achieve mastery of grade-level literature, grammar, and composition. Students will study various parts of speech and a variety of literature, including poetry and nonfiction in this textbook-free course. **Pre-Requisites:** English 9; English 10
For More Information

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