

Highlands High School



Program of Studies

2026-2027

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Program of Studies Information

The purpose of this document is to ensure that all families have the information needed to make informed course selections for the upcoming school year. We encourage families to read this document together and discuss students' course selections for the 2026-2027 school year.

When making course selections, students should consider their educational goals and the career path they plan to pursue. Using the Graduation Planning Template on page 5 will ensure that all graduation requirements are met prior to the student's anticipated graduation date. The High School master schedule is driven by student course selections. The number of sections for each course, and whether a course will run, is determined by the number of students enrolled. Courses require at least 10 students to be placed on the master schedule. **Once courses are scheduled, the master schedule does not allow for changes.**

Teachers will use student performance data to recommend appropriate courses. While students may be recommended for numerous Honors/AP/CHS-level courses, we strongly encourage them to consider their extracurricular and personal schedules, as well as their willingness to work on assignments outside the school day.

Should you have any questions during this process, please contact the school counseling department for guidance. We hope that this process ensures that all students are placed in classes that prepare them for their future endeavors.

Note: Each section heading in the table of contents is a link to that specific section. If you want to jump directly to a department's course offering, simply click on the name of the department in the Table of Contents.

High School Staff

Building Administration

Patrick Baughman	Principal	ext. 4610
Kaitlyn Selfridge	Assistant Principal	ext. 4605
Ryan Reitz	Dean of Students	ext. 4615
Brittany Barch	Office Secretary (Grades 11-12)	ext. 4601
Natalie Bayne	Office Secretary (Grades 9-10)	ext. 4600
Katie Jo Stobert	Athletic Director/Director of Transportation	ext. 5670
Carmen Corna	District Attendance Officer	ext. 3007

School Counseling Department

Beth Carrarini	School Counselor H-O	ext. 4651
Dr. Susie Gurrera	School Counselor A-G	ext. 4653
Marilyn Skwartz	School Counselor P-Z	ext. 4652
Deandra Wetzel	School Counseling Secretary	ext. 4650

2026-2027 Scheduling Timeline

The table below represents the timeline for student course selections and the distribution of student schedules for the 2026-2027 school year:

Date	Scheduling Event
February 3, 2026	8 th Grade Elective Fair and High School Information Day
February 4, 2026	9 th –11 th Grade Elective Fair
February 18, 2026	Parent Scheduling Information Meeting In-Person: Highlands High School @ 6:00 pm
February 19, 2026	Parent Scheduling Information Meeting On-Line: Via Zoom 12:00 am
February 17-25, 2026	High School Teacher Scheduling Conversations
February 27, 2026	High School & Middle School Teacher Recommendations Finalized
March 2, 2026	PowerSchool Open for Student Selections
March 2-13, 2026	Student Course Selection & Requests
March 3-4, 2026	8 th students input course selections @ Middle School with High School Counselor support
March 13, 2026	Student Course Selections Due
March 16-20, 2026	Counselor Verification
March 23, 2026	Parent Informed Consent mailed home
March 30, 2026	PowerSchool requests locked in
June-July 2026	26-27 Schedules Available to Students

Course Add/Drop Process

The deadline to request a schedule change is March 13, 2026. The required Google form, found on the [district website](#) and School Counselor's Google Classrooms, must be submitted no later than 11:59 PM on March 13, 2026. **There will be no exceptions.**

NOTE: Requests to change schedules at any time may be denied due to availability and class size.

Graduation Requirements

Students must earn 24 credits to be eligible for graduation. The table below shows the required credit distribution for graduation.

Subject Area	Required Number of Credits
English	4
Mathematics	3
Science	3
Social Studies	3
Health and Physical Education	2
Humanities	2
Electives	7

Graduation Planning Template

Below is a template to help students plan their course selections and ensure they meet all graduation requirements by the end of their senior year. School Counselors will meet with students each year to discuss future plans and to update their records to track all graduation requirements.

Subject	Credits Required	Grade	Courses	Year	Credit Earned
English	4	9			
		10			
		11			
		12			
Mathematics	3	9			
		10			
		11			
		12			
Science	3	9			
		10			
		11			
		12			
Social Studies	3	9			
		10			
		11			
		12			
Health and Physical Education	2	9			
		10			
		11			
		12			
Humanities	2				
Electives	7				
Keystone Exam Verification	NA		Algebra I		
			Literature		
			Biology		

Keystone and Act 158 Requirements

The Pennsylvania Department of Education requires all students to take the Keystone Exams in Algebra, Biology, and Literature as part of graduation requirements. Each exam is aligned with a trigger course. During the month of May, while a student is enrolled in the trigger course, Highlands High School administers the Keystone Exam. These courses are noted in the course descriptions below. Students must earn a score of 1500 or above on each assessment to achieve a proficient score. Students may retake the exams as many times as necessary, before their senior year, to achieve proficiency.

Act 158 of 2018 (Act 158) provides alternative pathways to graduation for students who do not achieve proficiency on all three Keystone Exams. Students can demonstrate postsecondary preparedness through one of four additional pathways:

1. Keystone Composite
2. Career and Technical Education (CTE) Concentrator
3. Alternative Assessment
4. Evidence Based

School counselors will continue to monitor student achievement on Keystone Exams and work with families to identify the best pathway for students during their annual counselor meeting. For additional information and a detailed explanation of each pathway, please visit the [district](#) or [SAS](#) websites.

Community Service Requirement

All students must complete community service hours to graduate. Students must complete 5 community service hours per year. Students must complete the community service verification form, available in the school counseling office, and return it to their school counselor as service hours are completed.



Grade Promotion

Promotion to the next grade is based solely on credits earned each school year. Students can earn 8 credits per year. Students must earn the following credits for promotion:

Grade Level	Minimum Credits Earned
10 th Grade	5
11 th Grade	11
12 th Grade	17
Graduation	24

Grading System

Percentage grades are used for each nine-week grading period as well as semester and final averages. The percentage grade the student earns in class will appear on the report card. The percentage grade earned in all classes will be calculated into a student's grade point average. The current percentage scale (90, 80, 70, 60) will be used.

GPA Calculations

The computation of a student's grade point average for a course is the product of the grade earned, the credit value, and the multiplier. Courses taught at the Advanced Placement (AP) or College in High School (CHS) levels have a multiplier of 1.10. Honors courses have a multiplier of 1.05. Each quarter grade contributes 22.5% of the final grade and the final exam contributes 10% of the final grade. The weighted average of these five values is the percentage recorded on the student's official transcript.

Work Release

Work release allows students in good academic standing who are pursuing credit to shorten their school day to pursue employment opportunities. Limited to seniors, students who apply for a release time/co-op program must be a student in good standing who is on track for graduation. Interested rising seniors should notify their school counselor during their course verification meeting. Over the summer, students will receive required employment verification paperwork; it must be returned before the student is released from school. All work release will be scheduled at the end of the academic day.

Global Scholars Program

The Global Scholars Program is an interdisciplinary program that cultivates globally minded students who, upon graduation, will be better prepared to navigate an increasingly international society. This program develops students' global competence and broadens their post-secondary opportunities, including university acceptance and scholarships, as well as career and workforce options. The Global Scholars Program is sponsored by the Pennsylvania State Modern Language Association ([PSMLA](#)) in collaboration with the World Language Department at Highlands High School.

Students must meet all graduation requirements mandated by the Highlands School District. In addition, students who wish to receive the Global Scholars Certificate upon graduation and wear the Global Scholars honor cord during the graduation ceremony must also satisfy the following requirements within the course of their high school career:

1. 8 Global academic courses (including 4 consecutive years of the same language)
2. 4 Global extracurricular activities
3. 20 Global service hours
4. 8 Global literature or media reviews

For more information, visit the [website](#) or contact the Global Scholars Program Advisor, Laura Fleischer Proano at lproano@goldenrams.com.

Highlands Virtual Academy (HVA)

Students may request to enroll in the Highlands Virtual Academy (HVA) to earn credits toward graduation. This program utilizes the Edgenuity Platform to present course content to students. The program provides students the flexibility to earn Highlands credits while working from home. Enrollment in this program is a privilege, and students who fail to meet program requirements may be directed to return to in-person learning at the discretion of the building administration. Please note that not all courses in the program of study are available to HVA students.

To register for HVA, students must notify their school counselor and attend an orientation with a parent/guardian. Students enrolled in HVA may also attend Forbes Road Career and Technology Center. Full-time and part-time HVA students are responsible for meeting all of Highlands School District graduation requirements to earn a diploma.

Smart Futures Career Readiness Program

This online tool provides students with a platform to explore post-secondary opportunities. In alignment with the Highlands School District 339 Plan, students use Smart Futures each year to complete activities that explore post-secondary career and/or educational options. The goal of this program is to provide students with resources to help them plan their post-high school path. Smart Futures is also used during the college application process to store letters of recommendation from teachers and staff. All students at HHS have access to this program.

Additional Program Information

ADVANCED PLACEMENT: AP courses require college-level thinking and learning. Colleges may grant credit based on scores on advanced placement tests administered in May. Please consult individual colleges/universities for their AP procedures. Students enrolled in Advanced Placement courses may take the AP exams in those subject areas. Highlands High School strongly recommends participating in the AP exams. Students who take the AP exams must do so at their own expense. Students who meet income requirements may be eligible for an exam fee waiver.

COLLEGE IN HIGH SCHOOL (CHS) COURSES: College in High School courses align with the course curriculum from local universities with which the district partners. When enrolled in a CHS course, students may earn college credit through the university associated with the course. Fees differ by university and are the student's responsibility. Students should contact the associated university when transferring these credits to their selected post-secondary institution.

GIFTED AND TALENTED EDUCATION PROGRAM (GATE): The Highlands School District provides opportunities that promote the growth of skills and knowledge necessary for identified gifted students to achieve their potential and to fulfill their future roles in our ever-changing global society. Highlands recognizes the unique abilities, talents, interests, and needs of intellectually gifted students, which require specially designed instruction and programming, and provides enrichment opportunities in math, ELA, and other areas to help students in the GATE program continue to develop their advanced skills.

NATIONAL HONOR SOCIETY: The National Honor Society (NHS) is the nation's premier organization established to recognize outstanding high school students. The NHS recognizes students who have demonstrated excellence in scholarship, service, leadership, and character. Qualified students will be invited to apply for induction during their sophomore year. Students selected for membership will participate in an induction ceremony in May.

SPECIAL EDUCATION PROGRAM: It is the policy of the Highlands School District that every child who qualifies for special education services will receive a free, appropriate, public education (FAPE). To the maximum extent possible, children with disabilities will be educated in the least restrictive environment. Student Placement decisions are made by the IEP team, which includes the parents.

SCHOOL COUNSELING PROGRAM: The school counseling department provides numerous services for students and families. Based on the American School Counselor Association model and the Pennsylvania Career Standards, school counselors provide services to all students across the domains of personal/social, academic, and career. Classroom, small-group, and individual interventions are the channels through which all students can grow in each domain.

STUDENT ASSISTANCE PROGRAM (SAP): SAP is a formal, comprehensive, and systematic approach to the early identification of students with learning barriers resulting from a variety of stressors. This program provides for both school supports and, when necessary, community resources to address barriers. SAP is an intervention, not a treatment program, that integrates information gathering, intervention, and follow-up through the SAP Team.

NOTE: THE ADMINISTRATION RESERVES THE RIGHT TO CANCEL ANY COURSE OFFERING OR TO ADJUST STUDENT SCHEDULES ON THE BASIS OF ENROLLMENT AND/OR TEACHER AVAILABILITY.

English Department Course Descriptions

ACADEMIC ENGLISH 9		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will focus on analysis of reading and analytical writing grounded in evidence from text. Ninth graders will analyze an author’s use of rhetoric to advance a point of view or purpose. Students will analyze how the author unfolds an analysis or series of ideas or arguments, including the order in which the points are made, how they are introduced and developed, as well as the connections made between them. Aligned to the PA SAS Modules, students will be exposed to various literary devices while exploring major texts. Students will increase vocabulary skills through various reading, writing, and speaking activities. This course will prepare students for post-secondary opportunities by providing opportunities for teamwork, collaboration, complex thinking skills as well as verbal and written communication used in various contexts.</p>		

HONORS ENGLISH 9		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn a 90% in English 8 and receive a recommendation from the English 8 teacher		
<p>Course Description: Students will focus on analysis of reading and writing supported by evidence from the text. Ninth graders will analyze an author’s use of rhetoric to advance a point of view or purpose. Students will analyze how an author creates and unfolds an analysis or series of ideas and arguments. Aligned to the PA SAS Modules, the curriculum teaches the skills of reading, writing, discussion, language use, and vocabulary development through the study of both literature and informational texts. Students are trained to be excellent critical thinkers, readers, textual analysts, writers, problem solvers, and creative producers of a compelling argument. The course will depend on high quality of work for a variety of varying audiences and purposes. Students will prove their command of the conventions through standard written language. This course will prepare students for post-secondary opportunities by providing opportunities for teamwork, collaboration, complex thinking skills, speaking activities, as well as verbal and written communication used in various contexts. Students will be expected to meet and exceed state standards for reading, writing, listening, and speaking.</p>		
Note: Summer reading and writing will be required for this class.		

ACADEMIC ENGLISH 10		Credit Value: 1.0
Grade Level: 10	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: English 9/Honors English 9		
<p>Course Description: Students analyze various forms of literature, including fiction, non-fiction, and other mediums for theme, author’s purpose, point of view, text structure, and rhetoric while citing textual evidence. Students conduct research and create essays that include academic vocabulary, facts, details, quotations, and other information. Students engage in collaborative discussion on topics through reasoning, providing evidence, and evaluating other’s views as well as their own. Students read, write, speak, and listen to diverse perspectives, as guided by the PDE SAS Grade 10 modules. The course content prepares students for Academic English 11 and imbeds college and career readiness skills by providing opportunities for analytical and critical thinking, teamwork, collaboration, speaking, and writing for various contexts.</p>		
<p>Note: The Keystone Literature Exam will be administered at the conclusion of this course.</p>		

HONORS ENGLISH 10		Credit Value: 1.0
Grade Level: 10	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors English 9 or a 90% or higher in Academic English 9 and receive a recommendation from the Academic English 9 teacher.		
<p>Course Description: Students analyze nonfiction and fiction literature as well as other mediums for theme development, author’s assumptions and beliefs, perspective and its impact on meaning and text structure, and rhetoric while using textual evidence. Students conduct research and craft essays using academic vocabulary, sufficient facts, concrete details, quotations, and other information with an awareness of projected audience knowledge. Students make important connections and distinctions, using varied transitions to link major sections of the text and provide description and evidence in their writing to create a cohesive and coherent essay. Students initiate and engage in meaningful collaborative discussion on grade-level topics heightened by their ability to reason, provide evidence, and evaluate the views of others while exploring their own beliefs and assumptions. Students read, write, speak, and listen to diverse perspectives in this accelerated course, as guided by the PDE SAS Grade 10 modules. Students engage in summer reading assignments. The course content prepares students for Honors English 11 or AP English 11 and imbeds college and career readiness skills by providing opportunities for analytical and critical thinking, teamwork, collaboration, speaking, and writing for various contexts.</p>		
<p>Note: Summer reading and writing assignment are required for this class. The Keystone Literature Exam will be administered at the conclusion of this course.</p>		

ACADEMIC ENGLISH 11		Credit Value: 1.0
Grade Level: 11	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: English 10		
<p>Course Description: This course emphasizes two areas: the survey of American Literature and the process of composition. The historical development of American Literature is traced from the Colonial to Contemporary Times, linking the development of American Literature to the philosophical and historical events occurring during various time periods. Students will approach this literature through novels, short stories, drama, poetry, essays and various analytical compositions. Completion of a research paper on an American author and/or influential American will be required. Students will trace the development of the nation and the common issues our society faces. Students will have opportunities to explore ventures after high school and compare them to specific characters and themes. Additionally, students will engage with non-fiction text to explore events outside of school life and begin to form interests and opinions.</p>		

HONORS ENGLISH 11		Credit Value: 1.0
Grade Level: 11	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors English 10 or a 90% or higher in Academic English 10 and receive a recommendation from the Academic English 10 teacher.		
<p>Course Description: This course focuses on American Literature with emphasis placed upon reading comprehension, vocabulary in context, and development of compositional skills. In adherence to the PA ELA Core Standards, students will use text dependent analysis to determine what the text says explicitly and implicitly and cite specific evidence to support conclusions. Students will consider task, purpose, and audience while choosing words, information, structures, and format deliberately when writing. Students will take part in class discussions by expressing their own idea clearly and persuasively. Students will enhance career and workforce readiness skills by infusing PA Career Education and Workforce Standards into the core curriculum. This includes creating a resume, writing college essays, and improving interpersonal skills through group work and public speaking.</p> <p>Note: Summer reading and writing will be required for this class.</p>		

ACADEMIC ENGLISH 12		Credit Value: 1.0
Grade Level: 12	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: English 11		
<p>Course Description: Aligned to the PA Core ELA Standards, this course will analyze classic literature components from varying genres, time periods, and origins; and an emphasis will be dedicated to British literature, linking the development of British Literature to philosophical and historical events. The students will approach literature through a study of fiction, non-fiction, poetry, drama, various analytical compositions, and an in-depth independent novel research paper. Becoming successful critical readers and writers will afford students the opportunity to “see” the world from a different and exciting vantage point. Students will submit all required papers to the turnitin.com system as well.</p>		

HONORS ENGLISH 12		Credit Value: 1.0
Grade Level: 12	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors English 11 or AP English Language and Composition, or a 90% or higher in Academic English 11 with a recommendation from the Academic English 11 teacher.		
Course Description: This course, adhering to the PA Core ELA Standards, will delve into classic literary elements across diverse genres, eras, and cultural origins, with a particular emphasis on British literature. The exploration of British literary works will be intertwined with the examination of philosophical and historical contexts, enriching students' understanding of the subject matter. Throughout the course, students will engage with various literary forms including fiction, non-fiction, poetry, and drama, as well as undertake analytical compositions and an extensive independent research project centered around a novel of their choosing. By fostering critical reading and writing skills, students will gain profound insights into the intricacies of human experience and the broader world. Additionally, emphasis will be placed on effective communication, empowering students to articulate their thoughts cogently and persuasively. It is noteworthy that compliance with the summer reading and writing assignments is mandatory, and all submissions must be made through the turnitin.com system.		
Note: Summer reading and writing will be required.		

AP ENGLISH LANGUAGE AND COMPOSITION		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors English 10/11 or a 90% or higher in Academic English 10/11 with a recommendation from the Academic English 10/11 teacher.		
Course Description: The AP English Language and Composition program aligned to the PA Core ELA Standards. Students will use text dependent analysis to determine what the text says explicitly and implicitly and cite specific evidence to support conclusions. Students will consider task, purpose, and audience while choosing words, information, structures, and format deliberately. Students will analyze voice, diction, detail, imagery, syntax, and tone to gain a deeper understanding of language and literature. Through reading and writing, students will become aware of the interaction between a writer's purpose, audience expectations, and subjects, as well as the way conventions and rhetorical devices contribute to effective writing. Students will take part in a variety of productive, structured conversations - as part of a whole class, small groups, or with a partner - building on others' ideas and expressing their own clearly and persuasively. This is an intensive writing course that will prepare college-bound students for freshman English and college composition courses. Additionally, advanced vocabulary study and mastery of rhetorical strategies and devices will be developed.		
Note: To participate in this course, successful completion of summer reading and writing assignments are required. The course will follow the AP College Board national syllabus. The reading list can be accessed at: http://www.collegeboard.com/student/testing/ap/sub_englang.html?englang		

AP ENGLISH LITERATURE AND COMPOSITION		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: English	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors English 11 or a 90% or higher in Academic English 11 with a recommendation from the Academic English 11 teacher.		
Course Description: This intensive reading and writing course examines the recognized classics of World Literature. In adherence to the PA ELA Core Standards, students will read the works of authors ranging from Sophocles to Shakespeare to Sartre and critically analyze aspects of these works in detailed written assignments, as well as Socratic Seminar discussions. An examination of vocabulary through literature, figurative language, and literary techniques will remain a focus throughout the course. This course will prepare college-bound students for freshman English, college composition, and literature courses.		
Note: To participate in this course, successful completion of summer reading and writing assignments is required. The course will follow the AP College Board national syllabus.		

ETHICAL DILEMMAS		Credit Value: 0.5
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: In this course students will analyze and discuss various ethical dilemmas to help them consider their own beliefs on issues happening around the globe and on topics that affect us as human beings. Students will get an introduction to philosophy and the ideas that drive our morals in society, as well as to psychology and sociology. Students will be working on improving reading and writing skills through the various ethical dilemmas and be working on critical thinking and argumentative skills. This course will aid in the development of writing and communication skills necessary for all 9 th -12 th grade English courses. To prepare students for future careers, this course will provide students with an opportunity to add to their career portfolio as well as to the skillset necessary for jobs that require writing, speaking, and critical thinking.		

PUBLIC SPEAKING		Credit Value: 0.5
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: This course allows students to develop their communication and rhetorical skills, which are essential for success in any career path. Students will prepare, research, and present informative, persuasive, demonstrative, and entertaining speeches. Students will also analyze and evaluate historic speeches as well as works from the present. Students should expect to speak regularly in front of classmates, participate in small-group and whole-class speaking activities, and practice presenting ideas aloud as a required part of this course.		

CREATIVE WRITING		Credit Value: 0.5
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Enjoy expressing your creativity through writing but struggle to find the time or inspiration? This creative writing course is your opportunity to bring your ideas to life on paper. Students will get to write amazing stories and poems with fun in-class activities and assignments. We will also explore excerpts from some of the best modern writing, teaching you how to use their style to paint vivid pictures with your words. Boost your imagination and be part of our creative writing class! Students should expect to write every day, actively participate in small-group discussions, and regularly share their work with peers in a supportive, respectful workshop environment.</p>		

GREATEST STORIES OF ALL TIME		Credit Value: 0.5
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Envision yourself captivated by enthralling narratives but daunted by the prospect of delving into classic literature. This course delves into beloved tales of revenge, love, madness, and redemption spanning diverse eras, offering insights into timeless stories that continue to resonate with audiences today. We alleviate the burden of extensive reading by providing comprehensive analyses of these classic narratives. If you aspire to comprehend the essence of classic literature without delving into each work individually, this class offers an ideal solution.</p>		

YOUNG ADULT LITERATURE		Credit Value: 0.5
Grade Levels: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: In this class, students will gain exposure to compelling Young Adult novels that resonate with real-life experiences and address significant themes. Beyond the enjoyment of captivating narratives, students will acquire a deeper understanding of fundamental English class concepts. The primary focus of this course is to enhance students' reading, critical thinking, and analytical skills. Through a combination of independent reading, collaborative group work, active participation in class discussions, and personalized projects, students will have the opportunity to articulate their perspectives, refine their communication abilities, and cultivate a genuine appreciation for literature that mirrors their own lives. Get ready for an immersive journey into the diverse and dynamic world of Young Adult Literature!</p>		

Mathematics Department Course Descriptions

ACADEMIC ALGEBRA I		Credit Value: 1.0
Grade Levels: 9, 10 and 11	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will formalize and expand on Algebraic concepts established in previous coursework. Students will deepen and extend their understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students will engage in methods for analyzing and using functions. Students will move between multiple representations of functions including but not limited to linear, exponential, and quadratics. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies. Based on historical achievement data, students may be scheduled into Academic Algebra I sections that have additional intervention time built in.</p>		
<p>Note: The Keystone Algebra Exam will be administered at the conclusion of this course.</p>		

ACADEMIC GEOMETRY		Credit Value: 1.0
Grade Levels: 9, 10 and 11	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Algebra I		
<p>Course Description: Students will design, develop, and promote reasoning and problem solving to validate geometric concepts and properties. Students will explore rigid and non-rigid figures including triangles, quadrilaterals, polygons, polyhedrons, and circles. Students will integrate algebraic and geometric concepts. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.</p>		

HONORS GEOMETRY		Credit Value: 1.0
Grade Levels: 9 and 10	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Algebra I as 8th Graders or be recommended by their Algebra I teacher in 9th Grade.		
<p>Course Description: Students will design, develop and promote reasoning and problem solving to validate geometric concepts and properties. Students will explore rigid and non-rigid figures including triangles, quadrilaterals, polygons, polyhedrons and circles. Students will integrate algebraic and geometric concepts. Topics are like Academic Geometry but are covered at an accelerated pace and in more depth. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.</p>		

ACADEMIC ALGEBRA II		Credit Value: 1.0
Grade Levels: 10, 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Algebra I, Geometry		
Course Description: Students will focus on the extension of the number system to a complex field, elementary functions using multiple representations (graphical, numerical, algebraic and verbal) including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear systems and matrices, probability and sequences and series. Problem solving mathematical practices influence the learning throughout the course. Students will use descriptive statistics and probability as tools to make inferences. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.		

HONORS ALGEBRA II		Credit Value: 1.0
Grade Levels: 9, 10 and 11	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors Geometry or a 90% or higher in Academic Geometry with a recommendation from the Academic Geometry teacher.		
Course Description: Students will focus on the extension of the number system to a complex field, elementary functions using multiple representations (graphical, numerical, algebraic and verbal) including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear systems and matrices, probability and sequences and series. Problem solving mathematical practices influence the learning throughout the course. Topics are like Academic Algebra II but are covered at an accelerated pace and in more depth. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.		

ACADEMIC PRE-CALCULUS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Algebra II		
Course Description: Students will cover selected topics in Advanced Algebra (Polynomials of Higher Degree, Rational Functions, Exponential Functions, Logarithmic Functions), Trigonometry (The Unit Circle, Trigonometric Functions of Any Angle, Inverse Trigonometric functions, Trigonometric Identities, Solving Trigonometric Equations) and Analytical Geometry (Circles, Parabolas) in depth. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.		

HONORS PRE-CALCULUS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors Algebra II or a 90% in Academic Algebra II and receive a recommendation from their Academic Algebra II teacher.		
Course Description: Students will cover selected topics in Advanced Algebra (Polynomials of Higher Degree, Rational Functions, Exponential Functions, Logarithmic Functions), Trigonometry (The Unit Circle, Trigonometric Functions of Any Angle, Inverse Trigonometric Functions, Trigonometric Identities, Solving Trigonometric Equations) and Analytical Geometry (Circles, Parabolas, Ellipses, Hyperbolas, Parametric Equations) in depth. Students must be willing to spend additional preparation time for this course. Topics are like Academic Pre-calculus but are covered at an accelerated pace and in more depth. This course will prepare students who have an interest in pursuing careers in STEM or vocational technologies.		

CHS/HONORS CALCULUS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors Pre-Calculus or be recommended by their Academic Pre-Calculus teacher.		
Course Description: This course is an introduction to calculus for students interested in business, economics, and other social sciences. Topics covered include derivatives, applications of derivatives, exponential and logarithmic functions, and integration. Focus on the application of real-life concepts provides rigor to the course.		
Note on the CHS option: Students may enroll with a CHS option through Seton Hill University.		

PROBABILITY AND STATISTICS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Algebra I		
Course Description: This course covers learning about the methods of descriptive statistics, which include data collection through surveys and displaying and summarizing data. Basic rules of probability will be covered. Methods of inferential statistics will be introduced, including creating confidence intervals for sample data.		

CHS/HONORS PROBABILITY & STATISTICS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors Algebra II or a 90% in Academic Algebra II and be recommended by their Academic Algebra II teacher.		
Course Description: This course covers learning about the methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, and the analysis of variance and contingency tables.		
Note on the CHS option: Students may enroll with a CHS option through University of Pittsburgh.		

INTRODUCTION TO COMPUTER SCIENCE		Credit Value: 1.0
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: None		
Course Description: This course offers an introduction to computer science. Students will learn the basics of computer programming and computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It provides a foundation for knowing how to utilize the tools for computer science and prepares students for advanced study in computer science. The course allows students to work independently in text-based Python. The course provides students with an understanding of the types of careers that require a computer science background.		

PERSONAL FINANCE		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Personal Finance	Duration: Semester
Prerequisites: None		
Course Description: Students will learn the skills to successfully manage their finances. Aligned to the PA Academic Standards, students will explore the concepts of money management, earning income, borrowing money, financial services, and risk management as well as savings and investments. Upon completion of the course, students will understand how to make financial decisions that support their future goals.		
Beginning with the class of 2027, all students must take this course before they graduate.		

TECHNICAL MATH FOUNDATIONS		Credit Value: 1.0
Grade Levels: 9 and 10	Fulfills Graduation Requirement: Mathematics	Duration: Full-Year
Prerequisites: None		
<p>Course Description: This course is designed for students who plan to enter technical training programs or the workforce after high school. The curriculum focuses on developing essential math skills through hands-on, real-world applications that align with various career fields. Topics include arithmetic operations, algebraic reasoning, probability, ratios, proportions, and geometric principles, with an emphasis on practical problem-solving strategies. Students will engage in projects such as planning a cross-country delivery, budgeting for international travel, analyzing production quality, and applying math concepts to construction, plumbing, and engineering tasks. Instruction will incorporate technology, including spreadsheet software and graphing calculators, to enhance computational efficiency and data analysis. Collaborative learning is emphasized, with students working in teams to develop communication, problem-solving, and conflict-resolution skills. By connecting mathematical concepts to real-world careers, this course helps students build confidence in their math abilities and develop critical thinking skills necessary for success in technical fields.</p>		

Social Studies Department Course Descriptions

UNITED STATES HISTORY 9		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: None		
Course Description: This course will focus on US History beginning with post-Civil War and Reconstruction. Students will examine the political, cultural, social, and economic history of the nation up through and including WWII. Students will read and analyze primary and secondary sources with an emphasis on analysis, writing, and discussion. This course will expose students to many careers that emerged in the post-Civil War era of American History and develop skills necessary for future social studies courses.		

HONORS UNITED STATES HISTORY 9		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: Students must earn a 90% or higher in Social Studies 8 and receive a recommendation from their Social Studies 8 teacher.		
Course Description: Students will utilize primary source documents, critical thinking, and evaluation skills to examine US History beginning with the post- Civil War and Reconstruction. This course will focus on US History beginning with post-Civil War and Reconstruction. Students will work at an accelerated pace to examine the political, cultural, social, and economic history of the nation up through and including WWII. The course will use primary and secondary source documents with an emphasis on analysis, writing, and discussion that will prepare students for future Social Studies courses, including AP and CHS courses. In addition, students will practice problem solving and collaboration skills.		

WORLD CULTURES		Credit Value: 1.0
Grade Level: 10	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: None		
Course Description: Students will examine global and cultural history. Students will investigate the people, events, conflicts, and customs of diverse groups from around the world, while analyzing both the past and present. Students will participate in discussion, read, and evaluate primary and secondary sources, compose essays, conduct research, and create projects to demonstrate their comprehension of course topics.		

HONORS WORLD CULTURES		Credit Value: 1.0
Grade Level: 10	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher and receive a recommendation from their United States History teacher		
Course Description: Students will examine global and cultural history at an accelerated pace. Students will investigate the people, events, conflicts, and customs of diverse groups from around the world, while analyzing both the past and present. Students will participate in discussion, critically read and evaluate primary and secondary sources, compose essays, conduct research, and create projects to demonstrate their comprehension of course topics. Students will write research-based, historical analyses of both historical figures and eras.		

ACADEMIC US GOVERNMENT		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Social Studies	Duration: Semester
Prerequisites: None		
Course Description: Students will develop an understanding of how the government system works so that they can be independent, responsible, and active citizens in our democracy. Students will compare our system of government with those around the world at varying points throughout history. Students will apply the design of our current constitution to the present and future of America so that we decide how, when, and why we need to institute change.		

AP US GOVERNMENT & POLITICS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors US History or 90% or higher in Academic US History and an 85% or higher in Honors/AP English or 90% or higher in Academic English.		
Course Description: Students will gain an understanding of how our government system works so that they can be independent, responsible, and active citizens in our democracy. Students will analyze primary source documents, court decisions, and mass media articles to identify their intent, purpose, and adaptation over time. Students will examine each branch of government and synthesize solutions for problems that exist in our government. Students will develop an acute understanding of political parties, mass media, and the role of interest groups in the creation of public policy.		

ACADEMIC ECONOMICS		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Social Studies	Duration: Semester
Prerequisites: None		
Course Description: Students will examine theory and policy of Macroeconomics, which will include, but will not be limited to government spending, taxation, banking, and money. Students will discuss, analyze, and apply their study to contemporary issues by using periodicals and other primary sources as reference. The course will use examples of the Macro concepts as related to personal finance. This course will help students develop analytical skills and prepare for a post-secondary career.		

AP ECONOMICS		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Social Studies	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors World Cultures or 90% or higher in Academic World Cultures.		
Course Description: Students will examine supply and demand, consumer behavior, market structures, and pricing. A policy application to government spending and taxation will also be included. Students will use examples of the Micro concepts as related to personal finance. Students will discuss, analyze, and apply their study to contemporary issues through relevant examples. This course will help students develop analytical skills and prepare them for a post-secondary career.		

AP US HISTORY		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in their previous Honors History course or a 90% or higher in their Academic History course and a recommendation from their most recent Social Studies teacher.		
Course Description: This course begins with early American colonization and continues up to the present. Students will engage in analytical reading and writing assignments to explore change over time and conflict and cooperation in US History. Students will use critical thinking skills, evaluative writing, and interpretation of primary sources to be successful. These skills will prepare students for college-level course work.		

AP EUROPEAN HISTORY		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in their previous Honors History course or a 90% or higher in their Academic History course and a recommendation from their most recent Social Studies teacher.		
Course Description: Students will analyze major themes in European History after 1450 such as poverty and prosperity, institutions of power, Europe’s interaction with the world, the rise and fall of states, and how the individual’s role in society created Europe as we know it today. Students will utilize critical thinking skills, evaluative writing, and interpretation of primary sources to be successful. These skills will help prepare students for college level course work.		

CIVIL RIGHTS MOVEMENT		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will examine the US Civil Rights Movement in the twentieth century through the analysis of primary sources, discussion, and critical reading. Students will explore the Movement in the 1950s, 1960s, and 1970s, including how the Movement fit into the larger context of American society and politics. The course will help students discuss modern day issues about race and ethnicity in America.		

CONSTITUTIONAL LAW		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will develop a sense of personal and social identity through the process of forming opinions about controversial issues in today’s United States. Students will experiment with how to properly debate, argue, and problem solve using facts and social cues through a semester-long study of conflict resolution. Students will learn the soft skills of constructive criticism, timeliness, and accountability through the process of being part of a debate team.		

HOLOCAUST & GENOCIDE		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will use critical thinking skills to study the Holocaust and genocides in Rwanda and Bosnia. Students will use primary and secondary sources about these genocides and evaluate the significance of these events. Students will also put the events in the context of current events related to antisemitism, prejudice, and discrimination.		

MODERN AMERICAN HISTORY		Credit Value: 0.5
Grade Levels: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will study the impact of WWII on subsequent decades, evaluate the United States as a world power, and investigate cultural changes in the United States over time. Students will evaluate and analyze primary sources to understand the history of the US and how it applies to their lives in the US today.		

INTRO TO PSYCHOLOGY		Credit Value: 0.5
Grade Levels: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will be introduced to the study of psychology and examine many of the theories and perspectives of the field throughout history. Students will specifically examine psychological concepts such as methods of observation, cognitive factors of learning, stages of memory, human development, psychological disorders, and personality types. Students will also become familiar with famous theorists and their theories. There will be an emphasis on developing critical thinking skills, and students will demonstrate those skills through written assignments, project design, and classroom discussions.		

CHS INTRO TO PSYCHOLOGY		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Students must earn an 85% or higher in their previous Honors History course or a 90% or higher in their Academic History course and a recommendation from their most recent Social Studies teacher.		
Course Description: Students will examine the field of psychology using primary sources, social media, and other influencing factors. Students will have discussions and debates, review case studies, conduct research, and design projects to develop their own opinions and ideas concerning human nature. Students will study theories of learning, infant and adolescent development, and a variety of psychological conditions. To develop an understanding of appropriate and productive human development. This course will help students prepare for college-level coursework.		

INTRO TO SOCIOLOGY		Credit Value: 0.5
Grade Levels: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: This course introduces students to the study of sociology and the theories and perspectives of the field throughout history. Students will analyze sociological concepts such as cultural diversity, social change and control, agents of socialization, social stratification, social institutions, urban development, deviance, and crime. Students will develop critical thinking skills and demonstrate those skills through written assignments, project design, and classroom discussions. This course will provide students with the opportunity to research careers related to the sociology field (social workers, data analysts, case workers, paralegals, etc.).		

CHS INTRO TO SOCIOLOGY		Credit Value: 0.5
Grade Level: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Students must earn an 85% or higher in their previous Honors History course or a 90% or higher in their Academic History course and a recommendation from their most recent Social Studies teacher.		
Course Description: Students will examine the impact of social relationships and groups on people and societies around the world. Through discussions, debates, concept analysis, case studies, research, written composition and project design, students will develop their own opinions and ideas concerning human nature and how society influences people. Students will have an opportunity to research careers related to the field of sociology. This class will help students prepare for college-level coursework.		

Science Department Course Descriptions

SCIENCE 9		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: Teacher Recommendation		
<p>Course Description: Students will focus on the nature of science and inquiry methods, biochemistry, enzyme function in chemical reactions, characteristics of living things, cellular biology, and ecology. This course is designed for some 9th grade students as a precursor to Academic Biology. Teacher input, projection scores, and student transcripts will determine eligibility into the course. Students enrolled in Science 9 would then take Academic Biology and the Keystone Exam in 10th grade.</p>		

ACADEMIC BIOLOGY		Credit Value: 1.0
Grade Level: 10	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will discover the relationship of structure and function as it relates to the levels of biological organization. Students will develop problem-solving and critical thinking skills through scientific exploration and experimental design. The course will aid in the development of skills needed to be successful in upper-level science courses such as Chemistry and Physics. The course will focus on cellular biology, molecular genetics, Mendelian genetics, bioenergetics, photosynthesis and cellular respiration, evolution, taxonomy, and comparative anatomy and physiology. Class instruction will include lectures, labs, projects, presentations, and a choice to dissect a preserved specimen. Successful completion of this course will result in a skillset for researching, problem-solving, and critical thinking.</p> <p>Note: The Keystone Biology Exam will be administered at the conclusion of this course.</p>		

HONORS BIOLOGY		Credit Value: 1.0
Grade Level: 9 and 10	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: Students must earn a 90% in their current science class and receive a recommendation from their current science teacher. It is recommended rising 9th grade students are also enrolled in honors math.		
<p>Course Description: Students will discover the relationship of structure and function as it relates to the levels of biological organization. Students will develop problem-solving and critical thinking skills through scientific exploration and experimental design. The course will aid in the development of skills needed to be successful in upper-level science courses such as Chemistry and Physics. The course will focus on basic principles of biology, biochemistry, energy and enzymes, photosynthesis and cellular respiration, cellular biology, cellular reproduction, molecular genetics, Mendelian genetics, evolution. Class instruction will include lecture, class work, labs, projects, presentations, and homework. This course moves quickly and digs deeper into the curriculum standards. This course will require time outside the classroom to complete all required work and studies. Successful completion of this course will result in a skillset for researching, problem-solving, and critical thinking.</p> <p>Note: Keystone Biology Exam will be administered at the conclusion of this course.</p>		

SUSTAINABILITY AND WATER CHEMISTRY		Credit Value: 1.0
Grade Levels: All	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will utilize the engineering design process to solve real-world sustainability challenges related to clean drinking water, a stable food supply, and renewable energy as viewed through the three pillars of global sustainability. The course follows the PA STEEL Standards. Analysis of sustainable cycles of matter will be conducted through year-long study of the health and sustainability of a local creek through water testing, modeling the chemistry of water, and linking these understandings to the phenomena of the aquaponics cycle. The Highlands Aquaponic space will be the focus of the hands-on Engineering design challenges to ensure a sustainable future for the space. The Highlands Aquaponics space will be a secondary classroom for this course. Successful completion of this course will result in a skillset encompassing the engineering design process, technical presenting, Socratic Seminars, and effective communication of sustainable solutions.</p>		

ACADEMIC CHEMISTRY		Credit Value: 1.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
Prerequisites: Biology		
<p>Course Description: Students will analyze the topics of matter classification, atomic theory, the periodic table, electron placement, formula writing, identifying reactions, the Mole concept, stoichiometry, acid/base reactions, and gas laws. Lab experiences are a significant part of this class. The course follows Next Generation Science Standards with an emphasis on PA Science Standards.</p>		

HONORS CHEMISTRY		Credit Value: 1.5
Grade Levels: 10 and 11	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
Prerequisites: Students must earn an 85% or higher in Honors Biology, achieve Proficient or Advanced on the Biology Keystone Exam, or earn a 90% or higher in Academic Biology and receive a recommendation from their Academic Biology teacher.		
Course Description: Students will defend experimental investigations with proper analysis of results, and cooperative problem-solving skills. This course follows Next Generation Science Standards with an emphasis on PA STEEL Standards. The curriculum topics mirror the Advanced Placement curriculum: atomic structure, molar relationships, thermochemistry, formula writing, reaction prediction, bonding, gas laws, and acids. This course moves quickly, digs deeper into the curriculum standards, and requires additional lab periods. This course will require time outside the classroom to complete all required work with a strong emphasis on group work. Successful completion of this course will result in a student prepared for a skillset for designing a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering design.		

ELECTRONICS AND MEASUREMENT		Credit Value: 1.5
Grade Levels: 11-12	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
Prerequisites: None		
Course Description: Students will apply their knowledge of electricity and electrical components to design, construct, and test electrical circuits. The course has an emphasis on extensive lab experiences, proper interpretation and presentation of results, and quantitative problem-solving skills. Topics covered in this class will include metrology – the proper method of taking measurements with a multitude of instruments including common measuring devices, voltmeters, ammeters, ohmmeters, calipers, and micrometers. Students will apply Ohm’s law and Kirchoff’s Law to properly design and construct series, parallel and compound circuits. Soldering techniques will be used to create and construct electronic devices with a myriad of uses.		

HONORS PHYSICS		Credit Value: 1.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
Prerequisites: Students must earn an 85% or higher in Honors Chemistry, achieve Proficient or Advanced on the Biology Keystone Exam, or earn a 90% or higher in Academic Chemistry and receive a recommendation from their Academic Chemistry teacher.		
Course Description: Students will relate physical concepts to collecting data and problem solving. The curriculum topics mirror the Advanced Placement curriculum: Motion, Forces, Energy, Momentum, Waves, Rotation and Gravitation. This course moves quickly, digs deeper into the curriculum standards, and requires additional lab periods. This course will require time outside the classroom to complete all required work with a strong emphasis on group work. Successful completion of this course will prepare a student to meet the challenges of a college-level Physics course.		

CHS BIOLOGY		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: Students must earn an 85% or higher in Honors Biology, achieve Proficient or Advanced on the Biology Keystone Exam, or earn a 90% or higher in Academic Biology and receive a recommendation from their Academic Biology teacher.		
Course Description: This course is an elective following the curriculum of Seton Hill University's Introduction to Biology course. It begins with in-depth concepts of cellular biology and continues into taxonomy and phylogeny. Detailed units on viruses, bacteria, protists, plants, invertebrates and vertebrates are studied. DNA technology is the final unit in the course, where gel electrophoresis is explored. This course is lab-intensive, including AP Biology labs and a comparative vertebrate dissection. Careers in the field of biology, ecology and medicine will be explored. Those students who enroll will have the opportunity to receive college credits through Seton Hill University at their own expense.		

AP CHEMISTRY		Credit Value: 1.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
Prerequisites: Students must earn an 85% or higher in Honors Chemistry or a 90% or higher in Academic Chemistry and receive a recommendation from their Academic Chemistry teacher. They must also have taken/be taking Pre-Calculus.		
Course Description: Students will investigate college level chemistry concepts and lab experiments. Students must possess strong problem-solving skills and a strong work ethic. Extensive studies outside of class time are required to perform well on the AP exam and in the course. Content focuses on the four big ideas: Scale Proportion and Quantity, Structure and Properties, Transformations, and Energy. The creation of a College Board account will be required for this course. AP Classroom and a flipped-classroom teaching style will be utilized weekly. Tests and coursework will strictly follow the approved College Board's Advanced Placement Chemistry course of study. Note: Students will be required to complete coursework during the summer, which includes problem sets and writing an experimental theory. There will be an exam within the first week of class to review the content of Honors Chemistry.		

AP PHYSICS		Credit Value: 1.5
Grade Level: 12	Fulfills Graduation Requirement: Science	Duration: Full-Year with lab every other day
<p>Prerequisites: Students must earn an 85% or higher in Honors Physics or a 90% or higher in Academic Physics and receive a recommendation from their Academic Physics teacher. They must also have taken/be taking AP Calculus.</p>		
<p>Course Description: Students will investigate college level physics concepts and lab experiments. Students must possess strong problem-solving skills and a strong work ethic. Extensive studies outside of class time are required to perform well on the AP exam and in the course. Content focuses on the seven topics: Motion, Forces, Energy, Momentum, Waves, Rotation and Gravitation. The course will rely on calculus to relay understanding of material and solving problems. Graphing calculators assist students with their learning. Tests and coursework will strictly follow the approved College Board’s Advanced Placement Physics C: Mechanics course of study. It is strongly suggested students have completed calculus or are concurrently enrolled in calculus. Successful completion of this course will prepare a student to meet the challenges of an honors, college-level Physics course.</p>		

HONORS ANATOMY AND PHYSIOLOGY		Credit Value: 1.0
Grade Level: 11 and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year
<p>Prerequisites: Students must earn an 85% or higher in Honors Biology, achieve Proficient or Advanced on the Biology Keystone Exam, or earn a 90% or higher in Academic Biology and receive a recommendation from their Academic Biology teacher.</p>		
<p>Course Description: Students will conclude that each individual system plays an integral role in the homeostasis of the human body. Students will discover the structure and function of the human body as it relates to the individual systems. This course is designed to provide students with a general introduction to Human Anatomy and Physiology. This course will focus on anatomical terminology, tissues, the integumentary system, the skeletal system, the muscular system, the cardiovascular system, human development, blood, and articulations of the body. Students enrolled in this course will be expected to participate in daily class lessons, complete models and projects outside the classroom setting and participate in multiple dissections within the classroom. Dissection is mandatory and alternative assignments to dissection will not be provided. Students enrolled in this course will also be required to complete one job shadowing experience during the year. This course is recommended for students who plan to pursue careers in the medical field. Students will be successful if they can learn the content but also apply it practically and develop professional skills aligned with future medical pathways.</p>		

EARTH AND SPACE		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will investigate Earth's mineral resources and natural history, as well as the science involved in weather prediction and evaluating climate change. Students will understand how the universe is structured and learn how to explore objects in it using astronomy simulation software. Throughout the course, students will be introduced to several STEM careers in geology, meteorology, and astronomy. This course is an elective course for students who are already enrolled in Science 9 or Biology and will possibly take Honors Geology and Planetary Sciences in the future. Successful completion of this course will result in students having a more informed view of their physical surroundings and a renewed desire to care for the planet's wellbeing.</p>		

HONORS GEOLOGY AND PLANETARY SCIENCES		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: Chemistry, Teacher Recommendation		
<p>Course Description: Students will investigate the inner workings and composition of the planet. Students will analyze Earth's materials and the behavior of plate tectonics and make comparisons with other planets inside and outside of the solar system. Students are expected to complete complex laboratory activities, a scientific research paper, regular homework assignments, and participate in group presentations. Throughout the course, students will explore careers in geoscience and astronomy-related fields. A successful completion of Earth and Space Science is preferred for this course but not required. This course is an elective course for 12th grade students in the honors program or who have departmental approval. Successful completion of this course will result in students understanding Earth's unique place in space and understanding of its fragile nature.</p>		

NATURAL RESOURCES, AGRICULTURE, AND HUMAN IMPACTS		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Science	Duration: Full-Year
Prerequisites: Chemistry		
<p>Course Description: Students will understand the finite nature of Earth's resources and how humans are impacting air, land, and water quality through emissions, mining, and agriculture on an industrial level. Students will understand the need for humans to minimize their environmental impacts and learn a sustainable approach to agriculture in Highlands's new Outdoor Learning Center. In doing so, students will regularly work outside to maintain compost systems and grow a variety of plants. Throughout the course, students will be expected to perform light outdoor gardening-related labor in weather conditions that are not always favorable. In the process, students will be exposed to a variety of careers related to mining, agriculture, and energy production. Successful completion of this course the students will be able to design and create a green space of their own.</p>		

Business and Technology Course Descriptions

Freshmen Seminar		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This exploratory course guides 9th grade students through essential questions of self-discovery and future planning: Who am I? Where am I going? How will I get there? Through interactive assessments, research projects, and hands-on activities, students will identify their unique interests, values, and strengths while exploring various career clusters and industries.</p> <p>The course introduces students to multiple postsecondary pathways, including entering the workforce directly after high school, pursuing two- or four-year college degrees, and attending vocational or trade schools. Students will learn about the education, training, and skills required for careers of interest, develop goal-setting strategies, and create a personalized action plan for their high school years and beyond.</p> <p>By the end of the course, students will have a clearer understanding of their potential career directions and the steps needed to achieve their goals, empowering them to make informed decisions about their academic coursework and future planning.</p> <p><i>Beginning with the class of 2027, all students must take this course.</i></p>		

MARKETING & SALES		Credit Value: 0.5
Grade Level: 9, 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will develop skills related to marketing, economics, business, marketing functions, pricing, marketing strategies, and goods and services. Students will explore the core functions of marketing, as well as up-to-date trends in marketing which are essential in the operation of a business. Students will have an opportunity to apply the marketing concepts through interactive enrichment activities. Students will enhance their communication and interpersonal skills. Students will also examine the selling process, the steps of a sale, closing the sale, customer-buying decisions, why customers buy, feature benefit selling and selling and product demonstrations. The many career opportunities available in this broad field of study will be explored. Students will reinforce their marketing and sales skills by having the option of competing in DECA: An Association of Marketing Students.		

RETAILING PRINCIPLES		Credit Value: 0.5
Grade Level: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Marketing & Sales		
Course Description: Students will study the dynamics of retailing, the free enterprise system, principles of promotion and advertising, types of retailing businesses, career opportunities in retailing and marketing businesses. Additional topics covered will be types of retailers, multichannel retailing, consumer buying behavior, retail marketing strategies, supply chain management, store management, retail pricing and store layout/design. Students will also learn proper customer service and selling techniques in retailing. When exiting the class, students will have the skills necessary to research jobs, complete employment applications, and successfully interview for a job. Students will exit the course with a completed resume.		

INTERNATIONAL BUSINESS		Credit Value: 0.5
Grade Level: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Marketing & Sales		
Course Description: Students will be presented with academic skill exercises that explain international business, cultural/social influences, international communications, importing, exporting, international trade, currency/risk management affecting world trade, international career planning, technology and the future global economy. Additionally, this course profiles a variety of interesting careers in the world of international business and identifies the skills and training needed to succeed in the global economy.		

Fine Arts Department Course Descriptions

Music

BAND		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Band is your opportunity to study music in an outgoing, uplifting, and award-winning team environment. Students will perform instrumental music from various time periods, cultures, and styles. Students are encouraged to participate in various district events to demonstrate how the skills learned from focused classroom instruction translate to live performances. These performances include Football Games, Band Festivals, Community Parades, Pep Rallies, Music Performance Assessments, Concerts, and Commencement. Members of the band will study units in both the Marching and Concert settings and are required to attend all summer (Band Camp) and after-school rehearsals. There is no extra-curricular participation in this course.</p> <p>Ensemble music courses are structured around a spiraling curriculum. Students advance in skill and understanding each year it is taken. Instrumental music prepares students for future career retention and advancement by developing work habits, cooperation, group interaction, time management, lifelong learning, and performance skills related to the interview process.</p> <p>Note: Students may enroll in both Band and Concert Choir for 0.5 credit each (3 of 6 days for each ensemble in a 6-day rotation) but are required to fulfill all requirements for both courses.</p>		

HONORS BAND		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
<p>Prerequisites: Students must earn a 90% or higher in band or possess instrumental aptitude at the 10th grade level or higher on one or more of the following: brass, woodwinds, or percussion, or through an audition.</p>		
<p>Course Description: Honors Band (scheduled concurrently with Band) extends the band curriculum by providing students the opportunity for acceleration. Coursework includes but is not limited to auditioning for Alle-Kiski Honors Band and PMEA Honors Band; research projects based on the students' primary instruments, composers, and performers; attendance at "outside" concerts, playing assessments, peer teaching (MS/Elem) and a student recital.</p> <p>Ensemble music courses are structured around a spiraling curriculum. This provides students a deeper understanding of content and advanced development of performance skills through subsequent years of study. Students considering careers in music education, performance, music therapy, music business, worship, technology, etc. are strongly encouraged to take Honors Band. Enrollment for rising 9th graders may be granted with the Director's approval. Instrumental music prepares students for future career retention and advancement through the development of proper work habits, cooperation, group interaction, time management, a mindset of lifelong learning, performance skills related to the interview process, character traits and entrepreneurial risks & rewards.</p> <p>Note: Students who choose to take Honors Band more than once will <u>not</u> receive an additional GPA adjustment.</p>		

JAZZ ENSEMBLE		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Enrollment in Band Class (for Winds and Percussion) or Audition.		
<p>Course Description: Study America’s one true and original art form – jazz music! Students will study the history of jazz, scales (blues and other various modes), music theory, jazz band and jazz combo literature, and improvisation. All instrumental sections will be limited in a manner yielding a full and balanced ensemble. Auditions may be required to fill limited positions, with preference given to students currently enrolled in Band Class.</p> <p>Students will perform at all scheduled concerts and festivals. Students are encouraged to participate in various district events to demonstrate how the skills learned from focused classroom instruction translate to live performances. Students are permitted to enroll in both Jazz Ensemble and Stage Band if they meet the prerequisites and have room in their schedule.</p> <p>Ensemble music courses provide students a deeper understanding of content and advanced development of performance skills through subsequent years of study. Instrumental music prepares students for future career retention and advancement through the development of proper work habits, cooperation, group interaction, time management, a mindset of lifelong learning, performance skills related to the interview process.</p>		

CONCERT CHOIR		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: None		
<p>Course Description: Students will develop their singing skills, broaden their musical understanding, and showcase their performance abilities. Concert Choir is for any beginner or experienced vocalist that is interested in participating in a more mature and performance-based vocal music elective. Fundamental vocal techniques and music reading skills will be emphasized through rehearsal and performance.</p> <p>Students are encouraged to participate in various district events to demonstrate how the skills learned from focused classroom instruction translate to live performances. The fall semester will consist of one major winter themed concert, plus two additional community performances/concerts. The spring semester will consist of one major spring themed concert.</p> <p>This course will increase students' performing desires and prepare them for any audition-based vocal music courses in the future. Audition-based vocal music ensembles to include Honors Choir, Variations Show Choir, and Musical Productions. Career readiness skills to include work habits, cooperation and teamwork, group interaction, time management, lifelong learning, character traits, and rewards.</p> <p>Note: Students may enroll in both Band and Concert Choir for 0.5 credit each (3 of 6 days for each ensemble in 6-day rotation) but are required to fulfill all requirements for both courses.</p>		

HONORS CHOIR		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Audition		
<p>Course Description: The Highlands Honors Choir is a weighted course that is designed for the advanced choral student who demonstrates growth and mastery of individual and choral vocal techniques, as well as music reading skills. Students will have the opportunity to showcase their performance abilities to the district and community events frequently. Total enrollment in the ensemble is determined by the necessary balance of vocal parts.</p> <p>Students are encouraged to participate in various district events to demonstrate how the skills learned from focused classroom instruction translate to live performances. Fall semester will consist of one major winter themed concert, plus additional community performances/concerts. Spring semester will consist of one major spring themed concert, plus additional community performances/concerts. (Grades 10 – 12; auditions may be opened to 9th grade if required to balance voice parts.)</p> <p>Honors Choir is specifically differentiated based of the quality of student audition, voice part, and student achievement acceptance into the group. Students will be expected to perform at more outside school events, learn more sheet music, sing higher caliber grade sheet music with more vocal splits, and complete more project-based learning assignments. These requirements set Honors Choir apart from Concert Choir.</p> <p>This course will increase students’ performing desires and prepare them for any audition-based vocal music courses or lead character roles in the future. Audition-based vocal music ensembles to include Variations Show Choir and Musical Productions.</p> <p>Career readiness skills to include work habits, cooperation and teamwork, group interaction, time management, lifelong learning, character traits, and rewards.</p> <p>Note: Students who choose to take Honors Choir more than once will not receive an additional GPA adjustment.</p>		

MUSIC THEORY 1		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Learn to read and write music! Students will study of the mechanics of music, key signatures, scales, intervals, and chords in written and aural form. Students should have prior knowledge of music and be able to demonstrate musical literacy through instrumental or vocal performance. Current enrollment in band and/or choir is encouraged but not required. Basic piano skills are a plus.</p> <p>Music Theory 1 is not just for college-bound music majors! Studying music prepares students for future career retention and advancement through the development of proper work habits, cooperation, group interaction, and time management.</p>		

MUSIC THEORY 2		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Students must earn a 75% or higher in Music Theory 1 and receive a recommendation from their music teacher.		
<p>Course Description: Students will expand upon the fundamental skills of Music Theory 1, taking gaining a deeper understanding of musical form and structure. Music Theory 2 offers an emphasis on aural training, solfeggio, and application. Students will explore arrangement or composing based on standard and current literature, with projects involving performance of student work. Basic piano keyboarding is incorporated into many elements of this course.</p> <p>This course will help to prepare future music majors or minors for college-level theory courses, and services music enthusiasts who would like to know more about musical form and composition. Studying music prepares students for future career retention and advancement through the development of proper work habits, cooperation, group interaction, and time management.</p>		

MUSIC TECHNOLOGY		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Learn to be a Music Producer and create your own beats! Students will study soundwaves, signal flow, stereo systems, multi-track recording, digital synthesizers, sequencers, and Musical Instrumental Digital Interfaces (MIDI). Music Technology utilizes digital audio workstations (DAW), various software programs – GarageBand, ProTools, StudioOne, and Soundtrap, as well as studio-grade microphones for recording. Electronically produced sound (loops, beats, etc.) will be used to create and present projects.</p>		

JAM BAND BASICS		Credit Value: 0.5
Grade Levels: A 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Ukuleles – Drums – Piano! This introductory course is designed to teach students with little-to-no prior experience how to play on a functional level. Students will learn the basics of drums/percussion, piano keyboarding, and ukulele in a fun, self-paced, project-based environment. Students will also study the elements of music (rhythm, melody, etc.) and notation. Consider pairing this course with Music Theory 1 for the best experience.</p> <p>Students will learn to play through technical instruction and individualized practice time. Music will include a variety of styles, from simple melodies to contemporary pop & rock songs and everything in between. Students will be able to apply what they learn here outside of school by playing with friends or extending their study of these three foundational instruments to things like guitar, bass, and drum-set. Skills in life-long musicianship are applicable to a variety of career fields.</p>		

BROADWAY AND BEYOND		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Students will research historical composition and performance techniques of musicals, explore musical plots in the context of social trends or influences, re-enact scripted musical material, and perform songs from show productions. All musicals that are researched in this course once premiered on Broadway in New York City! Students will engage in musical set design, scene structure, and character analysis. As a project-based learning assignment during musical season, students will design, create, and construct the current set of the musical production in collaboration with the art department. This course will also help students continue to develop and improve “the triple threats” to the performing arts world: singing, dancing, and acting.</p> <p>This course will increase performing desires and prepare students for any musical production where they can explore performing or non-performing opportunities. Broadway and Beyond will also highlight real-life career opportunities in the performing arts and assist students in further developing career readiness skills including work habits, cooperation and teamwork, group interaction, time management, and lifelong learning.</p>		

DANCE EVOLUTION		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This course will help guide any beginner or experienced dancer, as they “dance through the decades” and research the fundamentals of music through dance. Using a guided college-level music book titled, “Creative Dance for All Ages,” students will explore how to creatively use their bodies within musical performances of dance.</p> <p>The educational opportunities provided in the course will expose students to of musical theater and modern music to assist them in creating, composing, and performing choreographed dance routines. Choreography will be created for winter and spring choral concerts. Individual singing, dancing, and/or acting assessments and peer review will occur during weekly in-class performances. Basic music theory will be applied in understanding how to read music and create choreography for selected songs.</p>		

ANIMATED MUSICALS		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Students will study Disney musicals, the philosophy of magical moments, and researching musicals released by www.mtishows.com for high schools to license. Animated Musicals will be taught by a former Disney Cast Member of 10 years, sharing a performer’s “four keys to success.” Students will research historical composition and performance techniques of Disney musicals, explore musical plots in the context of social trends or influences, re-enact scripted musical material, and perform songs from show productions. Students will engage in musical set design, scene structure, and character analysis. As a project-based learning assignment during musical season, students will design, create, and construct the current set of the musical production in collaboration with the art department.</p> <p>Animated Musicals will also help students continue to develop and improve “the triple threats” to the performing arts world: singing, dancing, and acting – while increasing performing desires and preparing students for any musical production where they can explore performing or non-performing opportunities. Like Broadway and Beyond, this course will highlight real-life career paths in performing arts.</p>		

INSTRUMENTAL TECHNIQUES		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Instrumental study in one or more of the following: Brass, Woodwinds or Percussion; Possession or rental of an appropriate instrument.		
<p>Course Description: Instrumental Techniques is for all students (9-12) who have an interest in traditional woodwind, brass, or percussion instruments, or are interested in learning a new instrument. This includes students not currently be in Band. Current Band and Honors Band students are also able to receive small group / 1-on-1 instruction and academic supports not possible in the full ensemble setting. This course also services Honors music students or collegebound music majors who are preparing auditions and performance portfolios, as well as those interested in growing transferrable skills to their career pathway, outside of music (i.e., STEM).</p> <p>Instrumental Techniques mirrors the spiraling curriculum found in Band & Honors Band Class. Band instruments provide students a deeper understanding of content and advanced performance skills each year they are studied.</p>		

VOCAL TECHNIQUES		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This course will help guide any beginner or experienced singer, to research the fundamentals of singing. Students will research and explore the basic pedagogy and anatomy of how the body uses the voice to produce sound. Using a guided college-level music book, titled the "Foundations in Singing," students will explore how to sing. Individual singing, dancing, and/or acting assessments and peer review will be required within weekly performance days for the class. Basic music theory will be applied in understanding how to read music and sing properly for selected songs.</p> <p>This course will increase your performing desires and prepare you for any audition-based vocal music courses or lead character roles in the future. Audition-based vocal music ensembles to include Variations Show Choir and Musical Productions.</p>		

Visual Arts

FUNDAMENTALS OF TWO-DIMENSIONAL VISUAL ART		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will explore a variety of two-dimensional art media and sets the foundation for further study in the HHS Art department. Throughout the course, students will apply the Elements and Principles of Design in drawing, printmaking, painting, and mixed media. This course along with Fundamentals of Three-Dimensional Visual Art is one of two prerequisites for all other courses in the Visual Art department and students must pass with a 70% to advance to upper-level art classes.		

FUNDAMENTALS OF THREE-DIMENSIONAL VISUAL ART		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will explore a variety of three-dimensional art media and sets the foundation for further study in the HHS Art department. Throughout the course, students will apply the Elements and Principles of Design in sculpture, ceramics, and glass. This course along with Fundamentals of Two-Dimensional Visual Art is one of two prerequisites for all other courses in the Visual Art department and students must pass with a 70% to advance to upper-level art classes.		

DRAWING		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will build on their learning from Fundamentals and utilize a variety of drawing media such as pencil, marker, pastel, ink, pencil, and charcoal to create individualized artworks. This is a studio course, so students are expected to work during class on the assigned projects.		

PAINTING		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will build on their learning from Fundamentals and utilize a variety of painting media such as acrylic paint, watercolor, gouache, and oil paint to create individualized artworks. This is a studio course, so students are expected to work during class on the assigned projects.		

PRINTMAKING		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will create artworks building on learning from Fundamentals utilizing printmaking techniques such as monoprinting, blocking printing, gelli plate, and etching to create individualized artworks. This is a studio course, so students are expected to work during class on the assigned projects.		

MIXED MEDIA		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will create artworks building on learning from Fundamentals utilizing mixed media techniques including image transfers, layering, acrylic mediums and unique applications with drawing and painting techniques using a variety of materials. This is a studio course, so students are expected to work during class on the assigned projects.		

CERAMICS: WHEEL THROWING		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Fundamentals of Two-Dimensional & Three-Dimensional Visual Arts		
Course Description: Students will build on their learning from Fundamentals utilizing a variety of methods for creating clay artworks by throwing on the pottery wheel and using a variety of firing and glazing methods to finish the pieces. Students will explore the concepts of functional and decorative art. This is a studio course, so students are expected to work during class on the assigned projects.		

CERAMICS: HANDBUILDING		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Fundamentals of Two-Dimensional & Three-Dimensional Visual Arts		
Course Description: Students will build on their learning from Fundamentals utilizing a variety of methods for creating clay artworks by hand building using a variety of firing and glazing methods to finish the pieces. Students will explore the concepts of functional and decorative art. This is a studio course, so students are expected to work during class on the assigned projects.		

SCULPTURE		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Fundamentals of Two-Dimensional & Three-Dimensional Visual Arts		
Course Description: Students will build on their learning from Fundamentals specifically focusing on creating 3-dimensional artworks using a variety of materials. Students will work in various sculpture materials. This is a studio course, so students are expected to work during class on the assigned projects.		

GLASS		Credit Value: 0.5
Grade Level: 10, 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Fundamentals of Two-Dimensional & Three-Dimensional Visual Arts		
Course Description: Students will build on their learning from Fundamentals specifically focusing on creating 3-dimensional artworks using a variety of glass techniques. Students will work in various glass techniques. This is a studio course, so students are expected to work during class on the assigned projects.		

JEWELRY		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will create artworks building on learning from Fundamentals using a variety of materials, the focus is on creating wearable works of art such as earrings, bracelets, necklaces with beads, glass, gemstones, glass, plastic wire and a variety of other media. This is a studio course, so students are expected to work during class on the assigned projects.		

METAL ART		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will create artworks building on learning from Fundamentals using a variety of materials, the focus is on creating small works of functional and decorative works of art that are created using metal working techniques such as forming, piercing, texturing, chasing, soldering & cold attachments, casting, enameling and a variety of other media. This is a studio course, so students are expected to work during class on the assigned projects.		

INDEPENDENT ART		Credit Value: 1.0
Grade Level: 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Four Art credits with accepted application		
Course Description: Students will pursue an individualized course of visual art study based upon their skill and interest. This course requires teacher approval following a juried review of student's application. Students must be able to meet 5 times a week for a full class period.		

Technology Education Department Course Descriptions

ARCHITECTURAL CADD		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Students will learn about different types of residential homes, what establishes home values, open floor plans vs. traditional floor plans, and design trade-offs and considerations that Architects contemplate when working on any given project. Students will apply and analyze proper design aspects, considerations, and requirements when creating functional floorplans. Students will also design and build a scale model home using standard framing construction techniques. Plot plans, elevations, construction details, floor plans, three-dimensional building design, and model construction will all be explored. Students will utilize the latest version of Revit architectural design software.</p>		

GRAPHIC DESIGN		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This course will combine page layout software to create publications with text, graphics, photos and several other visual elements using desktop publishing software such as Microsoft Power Point, and Adobe Illustrator. Activities will include but are not limited to Vinyl Decals, Laser Engraving, and CNC cuttings. Students create a digital portfolio of their work throughout the semester.</p>		

HOME MAINTENANCE		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Students will explore and apply basic appliance maintenance and upkeep. Home Maintenance also covers basic house construction; students will use basic hand and portable power tools to complete tasks used for basic repair and maintenance of residential systems. Additionally, students will complete activities in the fields of framing, residential plumbing systems, residential electrical systems, drywall hanging/finishing, architectural coatings (paint), flooring, and finish trim work. Classroom instruction is combined with hands-on experiences in performing tasks like those required in the home. Students will also explore career opportunities in the fields of carpentry, plumbing, electrical, drywall hanging/finishing, painting, and flooring.</p>		

ROBOTICS I		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Students will explore the basic understanding of robotic operation systems such as control, guidance, propulsion, suspension, power, and programming. Students will create small robots (using VEX Robotics kits) designed and programed to complete specific tasks. This course also integrates Science, Math, and Engineering principles as it applies to robotic engineering. Robotics 1 is designed to prepare students for Honors Robotics II as well as robotic competitions.		

HONORS ROBOTICS 2		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Completion of Robotics I		
Course Description: Students will design, analyze and create the functions of robotic operation systems such as control, guidance, propulsion, suspension, power, and autonomous programming. The emphasis of the second level course is on computer programming as it relates to autonomous functions and robotic control. Students will have the opportunity to create, test and modify their robot prototype design to compete in robotics competitions against other high schools within the region.		

WOOD MANUFACTURING 1		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: Wood Manufacturing 1 is an introductory course that teaches students the basic skills used in materials and manufacturing. Students learn through hands-on activities and practice accurate measuring, layout, and assembly while building beginner-level projects.		
These projects are designed to help students gain confidence and improve their skills. Students will learn how to choose materials, use basic shop math, and apply common construction methods used in manufacturing.		
The course also introduces modern manufacturing tools, including laser engravers and CNC routers. Throughout the course, students will in focus on shop safety. Proper tool use and developing responsible work habits.		

WOOD MANUFACTURING 2		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Wood Manufacturing 1		
<p>Course Description: Wood Manufacturing 2 builds on the skills learned in earlier courses and introduces more advanced woodworking techniques used in modern manufacturing. Students will design and build more complex projects such as furniture, drawers, cabinets, and turned projects made on the lathe.</p> <p>The course focuses on precision, accuracy, and quality craftsmanship while using industry-standard methods for layout, joinery, and assembly. Safety procedures, shop organization, and proper tool care are reinforced throughout the course.</p> <p>By the end of the course, students will have developed advanced technical skills, problem-solving abilities, and a strong understanding of modern woodworking and manufacturing practices. These skills will prepare students for advanced classes, technical careers, or further training in woodworking, manufacturing, or construction related fields.</p>		

WOOD MANUFACTURING 3		Credit Value: 0.5
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Wood Manufacturing 2		
<p>Course Description: In this course, students will complete both guided and independent projects that allow them to use problem-solving, creativity, and technical skills to solve real-world manufacturing challenges. Students will focus planning, accuracy, craftsmanship, and quality throughout the design and building process.</p> <p>Along with individual projects, students will work on team-based manufacturing projects that support the school community. These projects may include designing and building long-lasting items for use in the high school, helping to improve the building, classrooms, and overall student environment.</p> <p>Throughout the course, students will practice workplace safety, teamwork, time management, and professional behavior in the shop. By the end of the course, students will have developed basic manufacturing skills, an understanding of modern production tools, and experience applying their skills to meaningful, real-world projects.</p>		

HONORS ENGINEERING CADD		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: Completion of Architectural CADD		
<p>Course Description: Students will use computer software to design and/or recreate virtual 3D-models of mechanical objects. Students will apply knowledge of Autodesk Inventor computer software as they become the engineers and design solutions that solve problems. Solutions will then be tested and analyzed as they are prototyped utilizing 3D printing technology. Blueprint reading and Geometric Dimension and Tolerancing (GD & T) will be taught concurrently with each new 3D model that students create. The culminating activity deals with Reverse Engineering, in which the students disassemble a complex mechanical object and recreate a virtual model of it. To prepare students for their careers, this course adopts the engineering mindset that focuses on the process more than a product.</p>		

World Languages Department Course Descriptions

GERMAN 1		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: None		
<p>Course Description: This introductory German course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-low to novice-mid proficiency level. Students will build beginner-level communication abilities through exposure to authentic German, active practice with real-life, cross-curricular tasks (e.g., introductions, coding robots, expressing personal interests), and exploration of cultural insights. This course also meets the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

GERMAN 2		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students must receive a 70% or higher in German 1 and receive a recommendation from their German teacher.		
<p>Course Description: This introductory German course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-mid to novice-high proficiency level. Students will build beginner-level communication abilities through exposure to authentic German, active practice with real-life, cross-curricular tasks (e.g., ordering a meal, visiting a doctor's office, shopping in a clothing store), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

GERMAN 3		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students receive a 70% or higher in German 2 and receive a recommendation from their German teacher.		
<p>Course Description: This German course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-high to intermediate-low proficiency level. Students will build mid-level communication abilities through exposure to authentic German, active practice with real-life, cross-curricular tasks (e.g., planning world travel, designing sustainable houses, interpreting literature), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

HONORS GERMAN 4		Credit Value: 1.0
Grade Level: 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
<p>Prerequisites: Students must receive an 85% or higher in German 3 or receive a cumulative grade of 85% or higher in German 1-3 and receive a recommendation from their German teacher.</p>		
<p>Course Description: This weighted Honors German course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at an intermediate-low to intermediate-mid proficiency level. Students will build mid-level communication abilities through exposure to authentic German, active practice with real-life, cross-curricular tasks (e.g., conversing with exchange students, discussing current events, analyzing environmental problems), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

SPANISH 1		Credit Value: 1.0
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
<p>Prerequisites: None</p>		
<p>Course Description: This introductory Spanish course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-low to novice-mid proficiency level. Students will build beginner-level communication abilities through exposure to authentic Spanish, active practice with real-life, cross-curricular tasks (e.g., introductions, coding robots, expressing personal interests), and exploration of cultural insights. This course also meets the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

SPANISH 2		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
<p>Prerequisites: Students must receive a 70% or higher in Spanish 1 and receive a recommendation from their Spanish teacher.</p>		
<p>Course Description: This introductory Spanish course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-mid to novice-high proficiency level. Students will build beginner-level communication abilities through exposure to authentic Spanish, active practice with real-life, cross-curricular tasks (e.g., ordering a meal, visiting a doctor's office, shopping in a clothing store), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.</p>		

SPANISH 3		Credit Value: 1.0
Grade Levels: 11 and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students must receive a 70% or higher in Spanish 2 and receive a recommendation from their Spanish teacher.		
Course Description: This Spanish course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at a novice-high to intermediate-low proficiency level. Students will build mid-level communication abilities through exposure to authentic Spanish, active practice with real-life, cross-curricular tasks (e.g., planning world travel, designing sustainable houses, interpreting literature), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.		

CHS SPANISH 4		Credit Value: 1.0
Grade Level: 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Students must receive an 85% or higher in Spanish 3 or receive a cumulative grade of 85% or higher in Spanish 1-3 and receive a recommendation from their Spanish teacher.		
Course Description: This weighted College in High School Spanish course is part of a proficiency-based program focused on developing practical listening, speaking, reading, and writing skills at an intermediate-low to intermediate-mid proficiency level. Students will build mid-level communication abilities through exposure to authentic Spanish, active practice with real-life, cross-curricular tasks (e.g., conversing with exchange students, analyzing current events, evaluating environmental problems), and exploration of cultural insights. This course also fulfills the 2-4 years of language study required by most universities and enhances career opportunities, adaptability, and cultural awareness—skills necessary in all careers.		
Note: Students may enroll in the <i>College in High School</i> program through the La Roche University to earn 3 college credits applicable to most colleges or universities.		

EF GLOBAL TRAVEL		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Summer Term
Prerequisites: None		
Course Description: Students participating in EF global travel will have the opportunity to earn high school credit by completing a Personalized Learning Guide which helps them put a more personal lens on their tour by tapping into their own interests and passions. Students learn on a deeper level when what they are learning connects to their own lives, and the Personalized Learning Guide makes sure it happens on tour. This course is aligned with National Social Studies Standards (NCSS), 21st Century Skills (P21), Standards for Foreign Language Learning (ACTFL), Common Core State Standards for English Language Arts and Literacy in History/Social Studies, and the EdSteps Global Competency Matrix. Students will be prepared to leverage their global travel experience for university and job applications and enhance career opportunities, adaptability, and cultural awareness—skills necessary in all careers.		

INTERNATIONAL STUDIES		Credit Value: 0.5
Grade Level: All	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This International Studies course is designed to develop students' career, education and workforce skills by exploring global issues and professions and diverse perspectives that shape our interconnected world. Through a multi-disciplinary approach, students will research global issues and careers, gain new perspectives, communicate their ideas and act. This course, offered in English, will enable students to develop global competence and explore topics such as career pathways, World Economic Forum Job Skills, the Global Scholars Program, Universal Human Rights, holidays around the world, global challenges and United Nations Sustainable Development Goals. This course prepares students to engage successfully in career, education and work as global citizens in an ever-evolving global landscape.</p>		

Family and Consumer Science Course Descriptions

FAMILY AND CONSUMER SCIENCE		Credit Value: 0.5
Grade Levels: 9, 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Semester
Prerequisites: None		
Course Description: This semester-long course will teach students the skills to manage the challenges of living and working in a diverse, global society. Topics will address the functioning of families and their interrelationships with work, community, and society. The focus will be on individuals' and families' recurring, practical problems. Classroom experiences will allow students to develop the knowledge and skills needed to identify, create, and evaluate goals and alternative solutions to significant problems of everyday life. Students will be taught to take responsibility for the consequences of their actions as they make choices about personal, family, and work responsibilities.		
Beginning with the class of 2027, all students must take this course before they graduate.		

Health and Physical Education Department Course Descriptions

WELLNESS 9 (Health & Physical Education)		Credit Value: 1.0
Grade Level: 9	Fulfills Graduation Requirement: None	Duration: Full-Year
Prerequisites: None		
<p>Course Description: The Wellness course is designed to provide students with an opportunity to learn about the physical, mental/emotional, and social aspects of health. An emphasis is placed on the importance of making healthy decisions that will lead to a higher quality of life. Course information is presented in a practical manner incorporating current health trends and concerns. Content areas include Personality, Stress, Mental Disorders, Relationships, Wellness, Nutrition, Non-infectious Disease, Human Growth and Development, STD'S, Alcohol, Drugs, and Personal Safety.</p> <p>The Physical Education portion of this course is designed to improve physical fitness levels while focusing on the tactile learner. It introduces the student to a variety of concepts which include motor learning, exercise physiology and kinesiology. The course has been developed to meet the increasingly diverse physical needs of the intermediate level student, focusing not only on the development of physical skills, but on concepts essential to building self-esteem, group problem solving, and the importance of team work to accomplish success.</p>		

PHYSICAL EDUCATION 10-12		Credit Value: 0.5
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Physical Education Credit or Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting. The integration of fitness concepts throughout the content is critical to the success of this course.</p> <p>Units may include, but are not limited to, the following sports: Volleyball, Kickball, Dodgeball, Ultimate Frisbee, Flag Football, Team Handball & Basketball.</p>		

YOGA & MINDFULNESS		Credit Value: 0.5
Grade Level: 10, 11, and 12	Fulfills Graduation Requirement: Physical Education Credit or Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: Yoga & Mindfulness encourages lifelong fitness. Students will learn yoga postures, breathing techniques, and relaxation methods to improve health and mindfulness. Students will develop body awareness and correct alignment in a variety of yoga poses including standing, balance, hip-opening, inversions, arm balances, twists, back bending, and core strengthening exercises. Each class will have a specific focus: pose break-down, yoga flows, strength-building routines, or relaxation.</p>		

PERSONAL FITNESS		Credit Value: 0.5
Grade Level: 10, 11, and 12	Fulfills Graduation Requirement: Physical Education Credit or Elective	Duration: Semester
Prerequisites: None		
<p>Course Description: This course is designed to give students the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the fundamentals of strength training, aerobic training, stretching and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.</p>		

Fire Service Training

FIRE SERVICE TRAINING (10-12)		Credit Value: 1.0
Grade Levels: 10, 11, and 12	Fulfills Graduation Requirement: Elective	Duration: Full-Year
Prerequisites: Must pass a pre-course swim test and be recommended by the PE teacher		
Course Description: This course is a distance learning elective that is offered in collaboration with the Highlands School District, Allegheny County Emergency Services, and the Allegheny County Fire Academy. Staff Instructor Krzeminski will provide entry level training along with 8 hands on sessions throughout the school year at the Allegheny County Fire Academy. This course is possible through the efforts of the Highlands Emergency Services Alliance (HESA) and the Alle-Kiski Health Foundation. The vision is to create highly trained professionals who are dedicated to exceeding the needs of their communities. Course topics will include fire training, first aid, and CPR.		

Forbes Road Career and Technical Center

Forbes Road CTC provides many educational courses and programs that can help you obtain the certification and skills you need to move forward in today's competitive job market. Credits earned at Forbes Road count toward elective credits on a student's graduation plan. The table below summarizes the courses offered at Forbes. For additional information, visit the [Forbes Road CTC website](#).

ARCHITECTURE/CONSTRUCTION	
Building Construction Technology	Building Construction Technology students gain technical knowledge as well as practical hands-on training in the trade which includes carpentry, plumbing, electrical, masonry and blueprint reading. Individuals learn to apply technical knowledge and skills in the maintenance and repair of residential and commercial buildings.
Heating, Ventilation & Air Conditioning	The program trains students to become qualified HVAC technicians and mechanics. A major portion of the instruction focuses on how to install, diagnose, service and maintain residential and commercial control wiring of HVAC systems.
Electrical Technology	Electrical Technology prepares students for entry level electrical and electronics careers. Their technical applications include green technology instruction within this state-of-the-art electrical laboratory. Computerized training equipment is utilized to prepare the students for careers in the "high-tech" electrical field.
Landscape Design	Landscape Design prepares students to be employees of nurseries, greenhouses, florists or landscape businesses. The curriculum includes turf management, landscape design and safety, pest and disease management and irrigation. Students obtain practical skills on our 42-acre campus and in the new greenhouse.

ARTS/COMMUNICATIONS	
<i>Advertising Design</i>	The field of advertising and commercial art requires a person who possesses a wide range of creative skills. The curriculum includes the foundation for all creative/design fields. Students apply the design principles to create a variety of products and printed materials - to reach and compel the target audience to purchase products and services.
SERVICE OCCUPATIONS	
<i>Cosmetology</i>	This program builds skills for a variety of careers within the cosmetology industry. The course includes skills in hair, skin and nail care as well as salon procedures. Upon completion of the required hours, students will be eligible to take the PA State Boards.
<i>Culinary Arts</i>	The Culinary Arts course offers instruction in the commercial restaurant industry including gourmet and fine dining, customer service, menu planning, cost-control, sanitation and hygiene. The curriculum encompasses the complete food cycle including nutrition, ordering processes, menu design and presentation skills.
<i>Early Childhood Education</i>	The course encompasses all phases of early childhood development including physical, social, emotional and intellectual. The curriculum also includes nutrition, guidance, discipline, the value of play and the science of child development.
HEALTH CAREERS/LAW ENFORCEMENT	
<i>Emergency Response Services</i>	This program is for students interested in pursuing a career, volunteer service or post-secondary education in emergency medical, law enforcement, fire or emergency management services. ERS provides training in a fully equipped lab including a fire tower and fire truck.
<i>Health Science Technology</i>	This program provides students with the hands-on training necessary to offer care to patients while working alongside other qualified health care professionals. Students will be taught basic nursing skills, Anatomy & Physiology and care of the patient with common diseases. CPR, First Aid, Bloodborne Pathogens and Direct Care Staff Worker are certifications that the students may obtain.
<i>Veterinary Sciences</i>	Veterinary Sciences prepares students to assist veterinarians during animal examinations and provide treatment and monitoring. Students will learn about maintaining medical and business records, charting and scheduling activities and a wide range of practice related duties as applied to animal health care, the biomedical field and the pet industry.
TRANSPORTATION	
<i>Auto Body Repair Technology</i>	The program provides the skills necessary to transform a wrecked vehicle into a masterpiece. Students receive instruction with state-of-the-art equipment for replacing or repairing auto body parts. Students learn to customize vehicles with painting techniques.
<i>Automotive Technology.</i>	Automotive Technology provides instruction covering a wide range of skills for the high-tech automotive industry. This includes engines, computer diagnostics, maintenance, repair and the opportunity to earn a PA State Inspection and Emissions Certification.
<i>Diesel Technology</i>	This program provides training on biodiesel, diesel, and gasoline powered medium/heavy trucks and equipment. This equipment is part of today's transportation, construction and manufacturing industries. Students can earn a PA State Inspection and Emissions Certification.

Logistics & Supply Chain Management	This program will actively engage students in the process of receiving, storing, shipping, controlling and distributing products. Students will use conveyors, hand trucks and carts to transport materials/supplies. They will work in the Forbes shipping and receiving department.
INFORMATION TECHNOLOGY	
Computer Networking & Security	This exciting technical course prepares students to design, maintain and secure today's Information Technology (IT) Systems. Network Security Specialists acting as Ethical Hackers prevent data loss from cyber-attacks protecting valuable data. Network Security Specialists are in demand in Law Enforcement, corporations and government.
Multimedia Design	This program allows students to be creative with design presentations for entertainment, industrial and commercial applications. This curriculum utilizes digital/video cameras and projectors in conjunction with computers. Students create animations, manipulate photographs, create presentations and web pages.

