

MILLERSBURG AREA SCHOOL DISTRICT

High School Course Guide

2024-2025

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“Empowering 21st Century learners, one student at a time”

Ms. Jennifer Sandusky– High School Principal
(sanduskyj@mlbgd.k12.pa.us)

Mr. Michael Lyter – Director of Curriculum, Assessment, & Instruction
(lyterm@mlbgd.k12.pa.us)

Mrs. Kelly Petery – Middle/High School Counselor
(peteryk@mlbgd.k12.pa.us)

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Art Courses

Course Title:	Art Foundations	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This introductory elective course will introduce students to a variety of materials, techniques, concepts and processes essential to understanding the visual arts. A focus will be made on developing the students' understanding of the elements and principles of design as they relate to the areas of drawing, painting, sculpture, photography, and graphic design. Art Foundations is a studio-based art course which focuses on art production but will also introduce students to the areas of art criticism and art history through a series of projects, videos, and visual presentations. This course will provide students with an opportunity to evaluate their interests and abilities in the visual arts program. This course is a prerequisite for all other courses in the visual arts program.

NOTE: There is a Final Exam and sketchbook assignments are required in this course.

Course Title:	Ceramics and Sculpture I	Grade Level:	10 - 12
Prerequisite:	Art Foundations	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This intermediate elective course introduces students to different approaches in making three-dimensional art, with a focus on incorporating the elements and principles of design into their artwork. Students will be exposed to a wide variety of sculptural materials, with an emphasis in clay. This includes both the potter's wheel and hand building techniques. Sculpture and Ceramics 1 is a studio-based art course which focuses on the production of three-dimensional art, but also exposes students to the areas of art criticism and art history through classroom critiques, videos and visual presentations.

NOTE: There is a Final Exam required in this course.

Course Title:	Ceramics and Sculpture II	Grade Level:	10 - 12
Prerequisite:	Ceramics and Sculpture I	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This course provides a more in-depth exploration of various three-dimensional materials and personal expression. Ceramics experience will also be enhanced through continued use of the potter's wheel and hand-building. Students will also reinforce their understanding of the elements and principles of design as they pertain to three-dimensional art through the completion of written and oral art critiques.

NOTE: There is a Final Exam required in this course.

Course Title:	Drawing and Painting I	Grade Level:	10 - 12
Prerequisite:	Art Foundations	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students can expect to gain a strong foundation in drawing and painting in this intermediate level course. This elective course will focus on further developing an understanding of the elements and principles of design in drawing and painting. Students will be exposed to a wide variety of artistic styles and art materials, such as graphite, pastels, ink, and acrylics as well as watercolor paints. Drawing and Painting 1 is a studio-based art course which focuses on the production of two-dimensional art but will also include art criticism and art history through homework assignments, videos, and visual presentations.

NOTE: There is a Final Exam and sketchbook assignments are required in this course.

Course Title:	Drawing and Painting II	Grade Level:	10 - 12
Prerequisite:	Drawing and Painting I	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this class students will gain an understanding of art history and how it influences the development of the art they make, as well as the art around the world. Students will build upon the drawing and painting skills they learned in Drawing and Painting 1 and start to focus on the development of stronger composition, as well as their own artistic style and voice. Students will work with a variety of drawing and painting materials, and will be exploring more complex artistic styles, techniques, and concepts. This class involves a high level of critical thinking and creative problem solving.

NOTE: There is a Final Exam and sketchbook assignments are required in this course.

Course Title:	Drawing and Painting III	Grade Level:	11 - 12
Prerequisite:	Drawing and Painting II	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this class students will build upon the drawing and painting skills they learned in Drawing and Painting 1 and 2 and focus on the development of stronger creativity as well as the ability to express ideas and viewpoints through their artistic creations. Students will work with a variety of drawing and painting materials, and will be exploring more complex artistic styles, techniques, and concepts. This class involves a high level of critical thinking and creative problem solving.

NOTE: There is a Final Exam and sketchbook assignments are required in this course.

Course Title:	Graphic Design I	Grade Level:	10 - 12
Prerequisite:	Art Foundations	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this introductory graphic design course, students will use a range of media from traditional art materials like paper, pencil, ink, and paint, to digital design tools, including Adobe creative software (Photoshop and Illustrator) and digital drawing tablets. Students will focus on basic graphic design principles while they learn computer software to explore typography, layout, and advertising design. Assignments will deal with appearance and with functionality. Graphic Design I is a studio-based art course which focuses on art production but will also develop the areas of art criticism and art history through videos and visual presentations. Students will be expected to participate in written and oral critiques.

NOTE: There is a Final Exam in this course.

Course Title:	Graphic Design II	Grade Level:	10 - 12
Prerequisite:	Graphic Design I	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this intermediate level course students will develop their abilities to think visually and think creatively to solve design challenges. Studio assignments will range from theoretical exercises to practical designs for “clients”, such as company logos, packaging design, and signage. Students will use both digital design and traditional art materials as tools to create their work. This more serious-level course builds upon experiences learned in previous art classes and provides a more in- depth exploration of the materials and equipment. This course requires students to work independently and collaboratively on projects and meet deadlines. Complex problems in design become more challenging at this level.

NOTE: There is a Final Exam in this course.

Course Title:	Photography & Photoshop I	Grade Level:	10 - 12
Prerequisite:	Art Foundations	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students will learn the history of photography, how the camera works, basic camera techniques, and how to process images in digital format. This course will provide students with basic composition principles as well as an extensive range of practical photographic techniques needed for entry into the photographic workplace and/or for artistic expression. Students will also learn many fundamental techniques of photo-editing using the Adobe Photoshop software. Photography and Photoshop 1 is a studio-based art course which focuses on art production. Students will also develop an understanding of the elements and principles of design through the completion of written and oral art critiques. Art history will be studied through visual presentations, videos, and homework assignments.

NOTE: There is a Final Exam required in this course.

Course Title:	Photography & Photoshop II	Grade Level:	10 - 12
Prerequisite:	Photography & Photoshop I	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This course is an intermediate level digital photography course intended for students who are serious photographers or who intend to pursue a career involving digital photography. The course will cover photography history, theory, and aesthetics more comprehensively than Photography & Photoshop I. It will develop composition skills as well as emphasize current trends in advanced professional level digital photography techniques. It will provide a digital photography foundation for students who wish to pursue photography or related fields. This more serious level course builds upon experiences learned in previous art courses and provides a more in-depth exploration of the photographic equipment as well as the Adobe Photoshop software. Complex problems in design become more challenging at this level. Students will also develop an understanding of the elements and principles of design through the completion of written and oral art critiques.

Note: There is a Final Exam required in this course.

Course Title:	Portfolio Study	Grade Level:	12
Prerequisite:	Instructor's approval	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This course is designed for students planning to pursue a career in the visual arts field. Students will use this course to develop a portfolio suitable to display the skills needed to enter a higher level of art education after graduation from high school. This course will only accept enrollment of students who have received approval from the high school art instructor. The curriculum will be constructed to meet the needs of the student according to his/her area of interest.

Business and Computer Courses

Course Title:	Accounting	Grade Level:	10 - 12
Prerequisite:	Introduction to Business	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

Accounting emphasizes proprietorship and partnership accounting principles. Each type of business is presented in a complete accounting cycle covering analyzing transactions, journalizing, posting, petty cash, financial statements and adjusting and closing entries.

Course Title:	*Financial Literacy	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Required)	Weighting:	Non-Weighted

Financial Literacy is a one semester course that will develop citizens who have the knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lives and understand personal financial responsibility. Topics covered: Economic behaviors, budgeting, investing, credit, checking & savings accounts, insurance, and consumer skills.

*All students in grades 10-12 must pass Financial Literacy in order to meet the state-required standards.

Course Title:	Business and Personal Law	Grade Level:	10 - 12
Prerequisite:	Introduction to Business	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course introduces to students how legal issues have an impact on everyday living and link the study of law to other legal issues they will confront. Students will learn about contracts, sales agreements, legal procedures, resolving disputes, ethics and technological law, and the role of the justice system in American society.

Course Title:	Entrepreneurship and Marketing	Grade Level:	11 - 12
Prerequisite:	Introduction to Business	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

In this course, students will learn about the process of starting and running a business including the concept of marketing. Topics covered include forms of ownership, business loans, hiring and managing staff, financing/protecting/ensuring your business, and promoting/producing/distributing/pricing a product. Individual and group projects will be incorporated into this course.

Course Title: Excel	Grade Level: 10-12
Prerequisite: Microsoft Apps & Algebra 1a	Course Length: Half-Year
Credit: .5 Credit (Elective)	Weighting: Non-Weighted

This is a comprehensive course that covers both the basic and advanced features and functions of Excel. Students will learn, practice, apply, and test their skills in real-world business scenarios, preparing them for certifications and professional careers. Upon completion of the course, students will have the opportunity to become Excel Certified through an exam via Test Out.

Course Title: International Business	Grade Level: 11 - 12
Prerequisite: Intro to Business	Course Length: Half-Year
Credit: .5 Credit (Elective)	Weighting: Non-Weighted

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

Course Title: Introduction to Business I & II	Grade Level: 9 - 12
Prerequisite: None	Course Length: Full-Year
Credit: 1 Credit (Elective)	Weighting: Non-Weighted

Everyone in our economy interacts with business – through the products we buy, the advertisements we see and hear, the jobs we hold, and the money we invest. This course introduces students to the world of business and the economy and will help students understand business operations, consumer roles, financial responsibilities, and the role of technology. Students will be introduced to numerous business and management strategies in the areas of marketing, human resources, and finances. We will also explore different types and sizes of businesses. Students should be prepared for an interactive class that will include hands-on activities and group discussions.

Course Title:	Introduction to Java Programming	Grade Level:	10 - 12
Prerequisite:	Scratch Coding	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. Java is one of the most widely used computer languages in the world. This course will teach students Java by having them complete multiple projects, both in the console and user interface, including mad libs, player vs computer games, battleship, tic-tac-toe, picture shuffler, and many more. This course is meant to give students lots of experience in Java by creating multiple stand-alone programs. This course assumes no coding experience with Java programming and includes self-graded quizzes and tests.

Course Title:	Java Script	Grade Level:	11 - 12
Prerequisite:	Introduction to Java Programming	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. In this course, students will learn to start programming with JavaScript. Students will learn the basics of JavaScript including: testing, functions, objects, arrays, loops, conditional code, operators and syntax basics. Students will learn timing and animations, and how to debug. The class will conclude with a robust project that incorporates everything they learned in the course.

Course Title:	Network System Design	Grade Level:	12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. This course will provide students with an understanding of computer networks and how they operate, as well as a basic understanding of how to manage and maintain computer networks. These skills will provide students with the ability to design, configure, and troubleshoot networks of all sizes. Students will learn the basics of network design, including how to identify network requirements and determine the proper network architecture. They will be instructed on the requirements of network models, as well as be introduced to local area networks. Students will also learn about Internet Protocol and the basics of routing data on a network. Students will be introduced to wide area networks and network security issues. In addition, students will learn about network management, including monitoring and troubleshooting. Last, students will learn about network operating systems and their role in connecting computers and facilitating communications.

Course Title: *Freshman Seminar	Grade Level: 9
Prerequisite: None	Course Length: Quarter-Year
Credit: .25 Credit (required)	Weighting: Non-Weighted

This course will provide students in every discipline – those entering college or the work force – with practical, hands-on, career, safety and computer skills using short and manageable exercises. This course will be broken into three segments: 1)Smart Futures career readiness, (2) Digital Citizenship, (3) Drivers Safety.

*Required course for all 9th grade students.

Course Title: Principles of Information Technology 1a	Grade Level: 9 - 12
Prerequisite: None	Course Length: Half-Year
Credit: .5 Credit (Elective)	Weighting: Non-Weighted

This is an online course through our CAOLA system. Develop your understanding and proficiency of computers! In this course, students will learn about computer hardware, Von Neumann architecture, peripherals, and maintenance as well as data management and storage options. Students will trace the history of operating systems and application software while also exploring network systems, administration, and troubleshooting. Finally, students will dive into word processing, spreadsheets, and databases to cement their knowledge of information technology.

Course Title: Principles of Information Technology 1b	Grade Level: 9 - 12
Prerequisite: Principles of Information Technology 1a	Course Length: Half-Year
Credit: .5 Credit (Elective)	Weighting: Non-Weighted

This is an online course through our CAOLA system. Building on the prior prerequisite course (Principles of Information Technology 1a), students will gain further knowledge of information technology starting with an overview of programming, algorithms, and compilers. Students will then learn the basics of webpage design and creating graphics. They will also explore security and cybercrime, emerging technologies, presentation software, and intellectual property laws. Finally, students will prepare for the future by discovering various careers in this field and planning their education.

Course Title:	Coding	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will introduce students to real coding programs and allow them to drag and drop coding blocks creating a fully functional program. This course assumes no prior computer coding knowledge. Code.org will be used for instruction.

Course Title:	Web Page Design	Grade Level:	10 - 12
Prerequisite:	Microsoft Apps	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

Students will become familiar with the concepts and design features used to create web pages. This is a hands-on design course which will require students to lay out web pages using multiple web building tools such as Google Sites and WordPress. Students will learn how to use tools to create and design web pages that are visually appealing (design principles, color theory/psychology, Wireframing, etc), as well as formatted to enhance searchability (SEO, SEM). Projects will include an electronic portfolio and community-based activities.

Course Title:	Microsoft Apps	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Quarter-Year
Credit:	.25 Credit (Elective)	Weighting:	Non-Weighted

This course will provide students in every discipline – those entering college or the work force – with practical, hands-on, computer skills using short and manageable exercises. This course will give students experience using Microsoft programs, including Word, Excel, PowerPoint and Publisher while utilizing PC labs.

Diversified Occupations

(approved 5/9/23)

Course Title:	Diversified Occupations	Grade Level:	11-12
Prerequisite:	Successful Application to the Cooperative Education Coordinator		
Course Length:	Half-Year to Full-Year		
Requirements:	Students must provide transportation		
Credit:	2-3 Credits (Elective). Number of credits varies by program and number of class periods	Weighting:	Non-Weighted

The Diversified Occupations program allows students to split their time between academic courses and part-time work in career fields that interest them. Students may enroll in Diversified Occupations during their 11-12th grade year. Students who in good academic standing and on track for graduation may be released from school half days to work. Students can work in any occupation; students need to be receiving wage within minimum working hours of 15 hours per week. This work-based learning program allows students to work in a variety of occupations such as warehousing, hospitality services, and retail stores.

Driver Education Course

Course Title:	*Driver Education (Classroom)	Grade Level:	10-12
Prerequisite:	None	Course Length:	Quarter-Year
Credit:	.25 Credit (Elective)	Weighting:	Non-Weighted

This is an online course. This course is a standardized program concentrating on the following areas: preparing to drive, driving laws, vehicle performance, driver performance, and automobile insurance.

*Students in the class of 2025 and 2026 must pass this course to meet the state-required standards. Students in the class of 2027 and beyond will meet this standard within the Freshman Seminar course.

English/Language Arts Courses

Course Title:	AP English Literature	Grade Level:	12
Prerequisite:	Honors English 11 with a Recommended average of 85%	Course Length:	Full-Year
Credit:	1.25 Credits (English)	Weighting:	Weighted at 1.10

Note: This course is available as a 3-credit dual enrollment course with Lackawanna College (Intro to Literature, ENG 110). Additional application and cost required.

This is a college level course and students may earn college credit. This course is designed to challenge the student's ability to think critically, synthesize literature, and write effectively. Students must complete required summer readings in preparation for the course. The course follows the guidelines developed and approved by the College Board. By using major works from different literary periods, this course focuses on a variety of genres, including the short story, the novel, epics, drama, and poetry. The works selected for the course will require careful, deliberative reading that yields multiple meanings. Numerous and extensive reading assignments will be used to promote close and analytical interpretation of the text. There will be challenging writing assignments, several pages in length, where the student will write and rewrite formal, extended analyses, and timed in-class responses. Students will be required to write researched literary analysis and reader-response papers. Papers will require recognized critics as secondary sources. College-level vocabulary and independent grammar review will also be incorporated as part of the course content as well as required participation in on-line discussions. Lastly, information concerning cultural, historical, philosophical, and psychological backgrounds will be addressed.

NOTE: There is a mid-term exam and final AP exam in this course. The cost of the final AP exam is the responsibility of the student. Also, there will be a summer reading requirement for this course.

Course Title:	Creative Writing 1	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

The objective of this course is to explore the different genres of writing through discussion and composition. Students will compose plays, essays and short stories such as comedies, mysteries and science fiction. Students will be exposed to different authors and styles of writing and will create their own compositions based upon their readings and class discussions. Some of the writing pieces will be based on film renditions of books that are on the literary merit list. Students may not have time to read various novels, thus the film will provide the background that they need to compose various time period writing pieces to add to their Creative Writing portfolio. This class will be offered if the number of students warrants the class.

Course Title:	Creative Writing 2	Grade Level:	10 - 12
Prerequisite:	Creative Writing 1	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

The objective of this course is to further explore the different genres of writing through discussion and composition. Students will have already taken Creative Writing 1, exposing them to many famous pieces of literature that are of relevance on the literary merit book list. Students will compose plays, essays and short stories such as comedies, mysteries and science fiction. Students will be exposed to different authors and styles of writing and will create their own compositions based upon their readings and class discussions. Some of the writing pieces will be based on film renditions of books that are on the literary merit list. Students may not have time to read various novels, thus the film will provide the background that they need to compose various time period writing pieces to add to their Creative Writing portfolio. This class will be offered if the number of students warrants the class.

Course Title:	English 9	Grade Level:	9
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Non-Weighted

This course emphasizes the study of language arts, grammar, usage, agreement, mechanics, etc. as well as provides an in- depth study of varied types of literature. The course introduces and analyzes the basic elements of the short story, Shakespearean drama, selections from nonfiction, and selected poetry and novel study. Emphasis is also placed on organizing writing effectively using evidence from text. Vocabulary is an integral part of the ninth grade English curriculum; words will be selected from each text and studied using synonyms, antonyms, analogies, and derivatives.

Note: There is a Mid-Term and Keystone Final in this course.

Course Title:	English 10	Grade Level:	10
Prerequisite:	English 9	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Non-Weighted

The objective of this course is to provide a solid foundation of the key elements of the various genres of literature (drama, poetry, nonfiction, short stories, novels, etc....) while focusing specifically on American Literature. Students will also continue to study grammar concentrating on usage, agreement, and sentence mechanics. Moreover, students will participate in a vocabulary study which will include components such as spelling, usage derivatives, and commonly misused words. Students will participate weekly in an independent reading program called *Read4Life*. Students will also be required to read one novel independently during the second semester and write a critical analysis of the work. The critical analysis is a requirement for completing English 10. It will serve as a quarter 4 grade as well as the final exam grade.

Note: There is a Mid-Term exam in this course. The critical analysis will count as the final exam grade. Students will ALSO take the Keystone Literature Exam at the end of this course.

Course Title:	English 11	Grade Level:	11
Prerequisite:	English 10	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Non-Weighted

This course emphasizes weekly exercises on vocabulary development, which will include dictionary study, textbook exercises, and weekly tests. The year will be spent on English writing and language skills whereby students should gain further knowledge of writing skills to improve self-expression. A research paper and the American Legion essay are required. The students will study samples of epics, poems, stories, essays, and plays written by English-born authors from 449 up to and including the contemporary period. The study will involve the reading, writing, and discussing of literature assignments from the texts. Students are required to read two books independently each marking period.

Note: There is a Mid- Term and Final in this course. Also, there is required summer reading.

Course Title:	English 12	Grade Level:	12
Prerequisite:	English 11	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Non-Weighted

Students will study World Literature and its contributions to Western Culture. A variety of themes will be discussed to further expose the students to a diverse literature curriculum. In an attempt to enhance comprehension and to expose the students to a variety of authors, each student will be required to read novels independently. Titles will be provided to the students at the beginning of the school year. This course also emphasizes the study of grammar, usage, agreement, and mechanics. Students will also study vocabulary. The second semester will be devoted to speech and oral communication, career readiness, and research methods. The final project will be a culmination a portfolio, resume, mock interview, and business proposal.

Note: There is a Mid-Term Exam and a Final Project in this course.

Course Title:	Greek Mythology	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

There are many ways in which Greek mythology continues to influence today's modern world; it provides the basis for some of the greatest stories ever told, it is often the subject of allusions throughout other works of literature, and it serves as the background for other multi-disciplinary areas of study such as music, art, history, and even advertising. Therefore, this course will provide a survey of the stories and the characters that make this genre so influential. Some of these include the Greek gods and goddesses, heroes, monsters, and the constellations. We will use technology, projects, creative writing, and presentations to demonstrate understanding of the stories. This course is recommended for **any** student desiring a more in-depth knowledge of Greek mythology. Likewise, this course is **strongly** recommended for the student preparing for participation in the Advance Placement Literature and Composition class.

Course Title:	Honors English 9	Grade Level:	9
Prerequisite:	Recommended 85% average or better in Grade 8 English	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Weighted at 1.05

This honors course emphasizes the study of language arts, provides an in-depth study of varied types of literature, and requires students to think critically to analyze texts. The course introduces and analyzes the basic elements of the short story, Shakespearean drama, selections from nonfiction, selected poetry, and novels. Students are asked to analyze the author's use of these elements in developing theme and central idea. Emphasis is also placed on organizing writing effectively and elaborating using evidence from text to clearly articulate original thoughts and inferences. Vocabulary is an integral part of the ninth grade English curriculum; words will be selected from each text and studied using synonyms, antonyms, analogies, and derivatives. There will be a summer reading requirement for this course.

Course Title:	Honors English 10	Grade Level:	10
Prerequisite:	Recommended 90% average or better in English 9 or 85% or better in Honors English 9	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Weighted at 1.05

This honors course emphasizes the study of language arts, provides an in-depth study of American literary greats, and requires students to think critically to analyze texts. This course continues to develop the skills for analyzing the different genres of literature, short stories, poetry, novels, selections from nonfiction, and drama. Emphasis will also be placed on writing effectively and analytically. Students will continue to study grammar, concentrating on usage, agreement, and sentence mechanics. Moreover, students will participate in a vocabulary study which will include components such as spelling, usage derivatives, commonly misused words, and knowledge of common roots, prefixes, and suffixes. Students will participate weekly in an independent reading program called *Read4life*. Students will also be required to read one novel independently during the second semester and write a critical analysis of the work. The critical analysis is a requirement for completing Honors English 10. It will serve as a quarter 4 grade as well as the final exam grade. Finally, students will complete practice exams to prepare for the Keystone Literature Exam.

Note: There is a Mid-Term exam in this course. The critical analysis will count as the final exam grade. Students will take the Keystone Literature Exam at the end of this course. Also, there will be a summer reading requirement for this course.

Course Title:	Honors English 11	Grade Level:	11
Prerequisite:	Recommended 90% average or better in English 10 or 85% or better in Honors English 10	Course Length:	Full-Year
Credit:	1.0 Credit (English)	Weighting:	Weighted at 1.05

This course is designed to improve students' ability to think critically, synthesize literature, and write effectively. The course is designed to further develop the skills needed to be successful in the AP program and at the collegiate level. By using major works from British literature, this course focuses on a variety of genres including the short story, the novel, epics, drama, and poetry. Numerous reading assignments will be used to promote close and analytical interpretation of text. There will be challenging and varied writing assignments; two of these include the Legion Essay contest and a research paper (Honors English 11 students will be required to write the 6-page research paper regardless of which World Cultures class they take). Also, students will be required to read one book independently each marking period from a pre-determined list.

NOTE: There is a mid-term and final in this course. Also, there will be a summer reading requirement for this course.

Course Title:	Keystone Literature	Grade Level:	11 - 12
Prerequisite:	Keystone Literature Exam	Course Length:	Half-Year
Credit:	.5 Credit (English or Elective)	Weighting:	Non-Weighted

This is a required course for any student who did not successfully pass the Keystone Literature Exam on their first attempt. This course reviews and emphasizes the need to meet the state assessment anchors for that exam.

NOTE: Students will re-take the Keystone Literature Exam at the end of this course.

Course Title:	Yearbook	Grade Level:	11 - 12
Prerequisite:	Application Process	Course Length:	Full-Year
Credit:	1.0 Credit (Elective)	Weighting:	Non-Weighted

The objective of this course is not only to create and produce the high school yearbook but also to provide "hands on" journalistic experiences in which the students develop individual skills in all phases of this specific type of publication. The course centers on a wide variety of journal skills including organization, planning, layout, design, photography, financing, advertising, and production, with specific emphasis on writing, editing, and proofreading skills.

*** Students should see Ms. Robbins (room A-152) to obtain the application. Only students who have submitted an application by May 19, 2022, will be admitted into the class.**

Mathematics Courses

Course Title:	Algebra 1	Grade Level:	8 - 12
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

The major topics presented in this course are polynomials, equations, inequalities, relations, functions, systems of linear equations, systems of linear inequalities, factoring, absolute values, square roots, exponents, data analysis, and word problems. Students are required to have a scientific calculator for this course.

NOTE: Students will take the Keystone Algebra Test at the conclusion of this course.

Course Title:	Algebra 1-A	Grade Level:	9 - 10
Prerequisite:	By Permission Only	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

This is a full-year course that covers the first half of Algebra 1 concepts. This includes absolute value, equations, inequalities, relations, and functions. Students are required to have a scientific calculator for this course.

Course Title:	Algebra 1-B	Grade Level:	10 - 11
Prerequisite:	By Permission Only	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

This is a full-year course that covers the second half of Algebra 1 concepts. This includes polynomials, factoring, systems of linear equations, systems of linear inequalities, square roots, exponents, and data analysis. Students are required to have a scientific calculator for this course.

NOTE: Students will take the Keystone Algebra Test at the end of this course

Course Title:	Algebra 2	Grade Level:	9 - 12
Prerequisite:	Geometry	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

Algebra 2 is designed to build on algebraic and geometric concepts covered in previous courses. This course develops advanced algebra skills involving quadratics, imaginary and complex numbers, polynomials, rational and radical functions, and exponential and logarithmic equations. Additional topics will also be discussed. The contents of this course are important for students' success on college entrance exams and placements. Students are required to have a scientific calculator for this course.

Course Title:	AP Calculus (AB)	Grade Level:	12
Prerequisite:	Pre-Calculus with a minimum recommended average of 75%	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Weighted at 1.10

Note: This course is available as a 4-credit dual enrollment course with Lackawanna College (Calculus, MAT 225). Additional application and cost required.

AP Calculus AB is designed to be the equivalent of a first semester college calculus course devoted to topics in the differential and integral calculus. AP Calculus AB is the study of limits, derivatives, definite and indefinite integrals, and the Fundamental Theorem of Calculus. AP Calculus AB focuses on student understanding of calculus concepts and provides experience with methods and applications. The course features a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally.

Course Title:	*Consumer Mathematics	Grade Level:	9-12
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

Consumer Mathematics is a review of the basic math skills and fundamentals. The course includes (but is not limited to) topics in personal finance such as gross and net income, savings and checking accounts, loans, investments, credit cards, and insurance. A variety of business math topics will also be discussed.

*Students who pass Consumer Math meet the state requirements for Financial Literacy and do not need to take the Financial Literacy Course.

Course Title:	Geometry	Grade Level:	9 - 12
Prerequisite:	Algebra 1 or Algebra 1-B	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

This one-year course is designed to obtain information about geometric relationships and to use this information in future courses in mathematics as well as in other fields. Concepts of space geometry are integrated with plane geometry along with a review of algebraic skills. Students are required to have a scientific calculator for this course.

Course Title:	Honors Algebra 2	Grade Level:	10 - 12
Prerequisite:	Geometry with a minimum recommended average of 85% or Honors Geometry	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Weighted at 1.05

Honors Algebra 2 is a more advanced and rigorous version of Algebra 2. This course is designed to build on algebraic and geometric concepts covered in previous courses. This course develops advanced algebra skills involving quadratics, imaginary and complex numbers, polynomials, rational and radical functions, and exponential and logarithmic equations. An independent study unit on matrices will be assigned. Additional topics will also be discussed. There will be a mandatory summer assignment. Students are required to have a scientific calculator for this course.

Course Title:	Honors Geometry	Grade Level:	9 - 12
Prerequisite:	Algebra 1	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Weighted at 1.05

This course is a more advanced and rigorous version of the traditional Geometry course. This course is designed to obtain information about geometric relationships and to use this information in future courses in mathematics as well as in other fields. Concepts of space geometry are integrated with plane geometry along with a review of algebraic skills (if needed). There will be a mandatory summer assignment. Students are required to have a scientific calculator for this course.

Course Title:	Honors Pre-Calculus	Grade Level:	11 - 12
Prerequisite:	Algebra 2 with a minimum recommended average of 85% or Honors Algebra 2	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Weighted at 1.05

Honors Pre-Calculus extends the concepts from Algebra 2 and Geometry. This course focuses on characteristics of quadratic, power, radical, polynomial, exponential, and logarithmic functions, along with solving related equations. Trigonometric functions, along with identities and related equation solving will be discussed. There will be a mandatory summer assignment. Students are required to have a graphing calculator for this course.

Course Title:	Keystone Algebra	Grade Level:	9 - 12
Prerequisite:	Keystone Algebra Exam	Course Length:	Half-Year
Credit:	.5 Credit (Math or Elective)	Weighting:	Non-Weighted

This is a required course for any student who did not successfully pass the Keystone Algebra Exam on their first attempt. This course emphasizes the need to meet the state assessment anchors for the Keystone Algebra Exam.

NOTE: Students will re-take the Keystone Algebra Exam at the end of this course.

Course Title:	Statistics	Grade Level:	11 - 12
Prerequisite:	Algebra 2 or Honors Algebra 2	Course Length:	Full-Year
Credit:	1.0 Credit (Mathematics)	Weighting:	Non-Weighted

This course is designed to show students how statistics is used to describe the world and make informed decisions. Major topics include data displays, probability, probability distributions, confidence intervals, hypothesis testing, correlations, and regression. Students are required to have a graphing calculator for this course.

Course Title:	STEM Engineering & Design	Grade Level:	11 - 12
Prerequisite:	Administration Approval	Course Length:	Half-Year
Credit:	.5 Credit (Math or Elective)	Weighting:	Non-Weighted

This course will consist of research of Science, Technology, Engineering, Arts, and Mathematics programs and designs in Technology Education. Activities involve both individual and group lab work. Students will design projects in the areas of manufacturing, mechanics, construction, and transportation. Current events and contemporary challenges in engineering and physics will be discussed.

Course Title:	STEM Engineering and Fabrication	Grade Level:	11 - 12
Prerequisite:	STEM Engineering and Design	Course Length:	Half-Year
Credit:	.5 Credit (Math or Elective)	Weighting:	Non-Weighted

This course will consist of research of Science, Technology, Engineering, Arts, and Mathematics programs and designs in Technology Education. Activities will involve both individual and group lab work. Students will design and fabricate projects in the areas of manufacturing, mechanics, construction, and transportation. Current events and contemporary challenges in engineering and physics will be discussed.

Course Title: Trigonometry

Grade Level: 11 - 12

Prerequisite: Algebra 2

Course Length: Full-Year

Credit: 1.0 Credit (Mathematics)

Weighting: Non-Weighted

Trigonometry extends concepts involving functions, relations, and graphing. This course will cover topics related to trigonometric functions, identities, inverses, and equations. Problem solving applications will be emphasized. Additional topics may be discussed. Students are required to have a graphing calculator for this course.

Music Courses

Course Title:	Band	Grade Level:	9 - 12
Prerequisite:	Prior instruction on at least one band instrument, ability to demonstrate certain aptitudes on that instrument, knowledge of musical rudiments, and audition by the Director	Course Length:	Full-Year Meets Days 1-3-5
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

The Band is a performing group open to all students in grades 9-12 who play a wind or percussion instrument. During the late summer and fall, the band functions as the marching band. Advance preparation for this is accomplished through practicing in August at band camp. The band performs at home soccer games. The band also participates in pep rallies, school assemblies, community events, and local community parades as well as neighboring community parades as the season and the director determines. During the remainder of the year, the group functions as the Symphonic Band presenting two concerts during the school year, one during the winter holiday season, and one during the spring term. Community performances may also be scheduled. Performance literature is drawn from all periods and encompasses every type and style within the competency levels of high school musicians. County Band, PMEA Festivals, and local Honors Band Festivals provide an opportunity to showcase our highly talented students in their pursuit of excellence. An important part of the instrumental music program is a number of small ensembles when talent and schedule permit. Membership in small ensembles is by invitation of the band director. Ensembles included in a given year are determined by availability of students and instrumentation. Examples of groups that may exist are jazz/rock ensemble, clarinet quartets, brass ensembles, woodwind and brass quintets, flute choir, and percussion ensemble. Students will be required to attend small group rotational pullout lessons (labs) once every cycle, attend all rehearsals and performances (including parades), and practice regularly.

NOTE: This course meets 3 times in a 6-day cycle.

Course Title:	Choir	Grade Level:	9 - 12
Prerequisite:	A willingness to work with the Director and other students. Appropriate behavior is an absolute requirement. Knowledge of the rudiments of music is desirable.	Course Length:	Full-Year Meets Days 2-4-6
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

The concert choir is a performing organization of students in grades 9 through 12. The ability to read music is not a required skill. All styles of choral literature will be explored in reading situations and in preparation for performances. The choir performs two major concerts each year. Occasionally, a men's choir or women's choir in will be an adjunct of this choir. All students who are enrolled in concert choir are responsible for the preparation and the adjudication of musical materials. Subject areas will include posture, breath control, attack tone, resonance, and diction, range, intonation and vocal interpretation as involved in correct singing processes. County Chorus, PMEA Choir Festivals provide an opportunity to showcase our highly talented students in their pursuit of excellence. **This course meets 3 times in a 6-day cycle.**

Course Title:	Jazz to Rock History	Grade Level:	9 - 12
Prerequisite:	Approval of the Instructor	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

This course is divided into units of the basic historical jazz and rock styles. By the end of this course, students should understand the different conventions operating in each style, identify sound examples of each, and name key practitioners. While students will not be expected to learn every name, they should become familiar with the greatest instrumental and vocal artists of each genre. The aim will be to understand style and not to memorize specific recordings. Students will also learn music history. In many ways the most important part of this course is to introduce students to new music. The styles of jazz and early rock are as varied as they are in all of classical or pop music; some of it students may like and some they may not. Students will be expected to listen to a significant amount of music and demonstrate an understanding of that music through weekly homework assignments.

Course Title:	Musical Theatre	Grade Level:	9 - 12
Prerequisite:	Approval of the Instructor	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this class, students will work on the skills of listening, analyzing, creating, applying, and critical thinking. Students will explore how various musical theatre forms from a variety of cultures and genres which contributed to the creation of one of the most complex and quintessentially American forms of art – the American Musical Theatre. Topics such as acting, improvisation, auditioning, direction, production, technical crew responsibilities, history, and the future of musical theatre will be explored. Students will examine how musical theatre has reflected and contributed to the social fabric and culture of the United States from the 17th through the 21st centuries. This course will identify and discuss the contributions of the major artists who have made a significant impact on the development of the American musical theatre. In addition, this course will provide coaching and information designed for the improvement of each student’s vocal preparation, audition skills and performance.

Course Title:	Music Theory 1	Grade Level:	9 - 12
Prerequisite:	Approval of the Instructor and a sincere interest in learning the mechanics of music and ear training. Being a member of a performing ensemble is strongly recommended.	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this class, students will work on the skills of application, critical thinking, musical analysis, and responsibility. This course is designed to teach students the “nuts and bolts” of why and how music works. Students will complete regularly assigned homework, participate in class discussion, take frequent quizzes and tests, and participate in group singing. Students will study the fundamentals of traditional music harmonization. Rhythm, melody, intervals, chord structure, and chord progressions will be discussed in detail. A basic knowledge of music notes and rhythms is preferred, but not necessary to succeed in this class. Only students serious about understanding the mechanics of how music works should elect this class. Incoming Freshmen should note that this course is not like general music classes in the middle school and it is not a music appreciation class.

Course Title:	Music Theory 2	Grade Level:	12
Prerequisite:	Music Theory 1 with a recommended average of 75% or higher. This course is targeted at seniors planning to major in music education in college.	Course Length:	Half-Year
Credit:	.5 Credit (Humanities or Elective)	Weighting:	Non-Weighted

In this class, students will work on the skills of application, critical thinking, music analysis, and responsibility. This course is designed to teach students advanced music theory. Students will complete regularly assigned homework, participate in class discussion, and take quizzes and tests. Students will study the advanced fundamentals of traditional music harmonization where Music Theory 1 left off. Rhythm, melody, intervals, chord structure, and chordal progressions will be reviewed in detail, with the introduction of more in-depth composition exercises, score study, arranging for band and orchestra, voice leading, non-chord tones, cadences, secondary dominant chords, and a brief introduction to modes. The course will include a basic composition exercise. A thorough knowledge of music concepts taught in Music Theory I is required to succeed in this class. Only students planning on majoring in music education or performance should elect this class during their junior or senior year. Students completing Theory I at an earlier age must gain approval to take it sooner.

Physical Education, Health, and Human Services Courses

Course Title:	Health	Grade Level:	10
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Health)	Weighting:	Non-Weighted

This course is presented in four sections, Section One, "Mental Health," covers communication skills, self-esteem, personalities, stress, coping techniques, understanding mental disorders, and other social health issues. Section Two, "Nutrition," deals with wellness, nutrition, and selection of better nutritional choices, and dieting. Section Three, "Physical Wellness," this section covers body systems, and the different types of physical fitness techniques. Students will be able to set up a personal fitness plan after this section. Section Four, "Human Growth and Development," this section covers the structure of the reproductive systems, pregnancy, birth control, STD's, child care, and abstinence.

Course Title:	Health Sciences Foundation 1a	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. In this course, students will be introduced to the rewarding field of health science. Students will acquire foundational knowledge required to pursue a career, such as the roles in the health care industry and the education, training, and credentials needed to attain them. Basic medical terminology principles of anatomy and physiology, and legal and ethical responsibilities are also discussed. In addition, students will explore communication, teamwork, and leadership techniques – providing a solid basis for those wanting to advance through the health sciences.

Course Title:	Health Sciences Foundation 1b	Grade Level:	11 - 12
Prerequisite:	Health Science Foundation 1a	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. Building on the prior prerequisite course (Health Science Foundations 1a), students will further develop their understanding of health science. Starting with safety, students will learn about their responsibilities for ensuring patient and personal safety with special attention paid to emergency procedures. Infection control, first-aid, CPR, and measuring vitals are discussed in detail. Students will also learn about numerical data such as systems of measurement, medical math, and reading and interpreting charts. Finally, students will examine effective teamwork and leadership characteristics while building their employment skills.

Course Title: Introduction to Careers in Health Sciences

Grade Level: 9 - 12

Prerequisite: None

Course Length: Half-Year

Credit: .5 Credit (Elective)

Weighting: Non-Weighted

This is an online course through our CAOLA system. This course is an overview of health careers and overriding principles central to all health professions. The course provides a foundation for further study in the field of health science. When students complete the course, they will be able to discuss the potential career choices and understand basic concepts that apply to these different choices. Unit 1 focuses on science and technology in human health. Unit 2 focuses on anatomy and physiology in health and disease. Unit 3 focuses on privacy ethics, and safety. Unit 4 focuses on communication and teamwork in the health care environment. Finally, unit 5 focuses on health careers.

Course Title: Introduction to Human Services

Grade Level: 9 - 12

Prerequisite: None

Course Length: Half-Year

Credit: .5 Credit (Elective)

Weighting: Non-Weighted

This is an online course through our CAOLA system. This course introduces high school students to the possibilities for careers in the human services professions. Through anecdotes, lessons, and a variety of assignments and projects, students will learn about the broad variety of jobs available in the human services. These begin with entry-level positions, such as associate social workers, that require only a two-year Associate of Arts degree. At the apex of the profession, being a psychiatrist brings the most prestige and the biggest salary, but only after many years of school and training. Students will learn exactly what the human services are and the ethics and philosophies of the helping professions. The history of the profession will be covered, as well as the impact of the cultural, social, and economic environment on individual people, especially those who need social services assistance. By the conclusion of this course, students will have a firm introductory understanding of the social services professions. Employment at all levels of social work and related jobs is projected to grow rapidly over the next decade. Students will have a better idea of whether this is a career course they would like to explore further.

Course Title: Introduction to Nursing A

Grade Level: 11 - 12

Prerequisite: None

Course Length: Half-Year

Credit: .5 Credit (Elective)

Weighting: Non-Weighted

This is an online course through our CAOLA system. This course introduces students to the field of nursing. In this course, students will learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. Students will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention.

Course Title:	Introduction to Nursing B	Grade Level:	12
Prerequisite:	Introduction to Nursing A	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. In this course, students will examine various nursing theories, as well as focus on the nursing process including assessment, diagnosis, and treatment options. Students will also learn about professional and legal standards and ethics. Additional skills of communication, teaching, time and stress management, patient safety, and crisis management will be included.

Course Title:	Lifetime Fitness/Wellness 1	Grade Level:	11
Prerequisite:	Grade 10 Physical Education	Course Length:	Full-Year
Credit:	1.0 Credit (Physical Education)	Weighting:	Non-Weighted

This course is teacher led and directed in maintaining a higher level of wellness. Students will be involved in self- measurements, nutrition data collection and analysis, record keeping, tracking of results, and analysis of wellness factors. There will be little opportunity to participate in team sport activities. Activities will be varied by the teacher and may include weight training, yoga, Pilates, individual sport activities, etc. Emphasis will be on lifetime activities and commitment to healthy lifestyles. Discussion and observation of exercise and aging will be part of this curriculum, including various stages of human development. Through these activities, students will be promoting lifetime fitness. Research into individual health topics will be optional. It needs to be restated that the instructor will set up workout routines, and students will be under supervision at all times.

Course Title:	Lifetime Fitness/Wellness 2	Grade Level:	12
Prerequisite:	Lifetime Fitness/Wellness 1	Course Length:	Full-Year
Credit:	1.0 Credit (Physical Education)	Weighting:	Non-Weighted

This course is for the self-motivated student who is interested in developing and maintaining a high level of wellness. Students must submit an individual 6-week fitness program that demonstrates a basic knowledge of physical fitness principles. The program must work to develop at least one area of health fitness (cardiovascular, strength, flexibility, or body composition). Students will be involved in self- measurements, nutrition data collection and analysis, record keeping, tracking of results, and analysis of wellness factors. There will be very little opportunity to participate in team sport activities. Activities will be varied and may include swing dance, yoga, tai chi, etc. Emphasis will be on lifetime activities and commitment to healthy lifestyles. Discussion and observation of exercise and aging will be part of this curriculum, including various stages of human development. Through these activities, students will be promoting lifetime fitness. Research into individual health topics will be optional.

Course Title:	Physical Education	Grade Level:	9 - 10
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Physical Education)	Weighting:	Non-Weighted

The Physical Education Program is a required course of study to be taken by all male and female students in grades 9 through 12. The major emphasis of the program is maximum participation, which requires a specific dress for safety purposes. Students will be expected to demonstrate development in motor physical fitness and be aware of the importance of lifelong physical activity. The second point of emphasis is the individual's knowledge of the rules, regulations, and safety factors of various sports. The third point of interest is on the skill level of each individual participant. Skill and strategy are taught in a progression throughout grades 9 through 12. A shower is highly recommended for health reasons after each class. The Physical Education Program will utilize facilities available such as the gymnasium, weight room, mat room, football field, football practice field, two tennis courts, softball field, and Johnson Gym. The content area of the program will involve team and individual sports. Emphasis will be placed on the lifetime sports. The areas that will be covered are basketball, badminton, softball, archery, tennis, flag football, speedball, volleyball, team handball, physical fitness, wrestling, golf, various competitive games, dance, aerobics, step aerobics, weight training, and yoga.

Course Title:	Psychology	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

The semester course is designed to introduce students to the study of mental processes and behavior of themselves, humans, and animals. Students will receive a general overview of several facets of psychology. Attention will be paid to the idea that individual changes can yield positive life-long results.

Science Courses

Course Title:	Applied Chemistry	Grade Level:	11 - 12
Prerequisite:	Biology and Algebra 1 (or Algebra 1A and Algebra 1B)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Non-Weighted

This course is recommended for the career pathway and vocational students. Chemistry is the study of matter, its properties, and the changes it undergoes. Applied chemistry is the application of the principles and theories of chemistry to answer a specific question or solve a real-world problem, as opposed to pure chemistry, which is aimed at enhancing knowledge within the field. This course uses laboratory activities, experiments, and other activities to give students hands-on experience with various pieces of chemistry equipment and to solidify concepts covered in class. Concepts covered include the study of atoms, the periodic table, chemical bonding, compound nomenclature, chemical reactions, characteristics of gases, solutions, and acids/bases.

Course Title:	Biology	Grade Level:	10
Prerequisite:	Environmental Science Or Honors Environmental Science	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Non-Weighted

Biology is the study of living things. Therefore, understanding life and life processes depends on mastering the unifying principles and concepts applicable to all life forms. The approach of this course emphasizes the fundamental unity of life forms and their diversity. The course focuses on major life processes and is arranged from simple levels of organization to complex levels. Basic chemistry, cell biology, and genetics precede information about organisms, populations, communities, and ecosystems.

NOTE: There is a Mid-Term in this course. Also, all students will take the Keystone Biology exam at the end of this course in lieu of a final.

Course Title:	Chemistry	Grade Level:	11 - 12
Prerequisite:	Biology, Geometry, and Algebra 2 (which may be taken concurrently)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Non-Weighted

This course is recommended for the college-prep student. Chemistry is the study of matter, its properties, and the changes it undergoes. This course uses laboratories, activities, and experiments to give students hands-on experience with various pieces of chemistry equipment and to solidify concepts covered in class. Students will be required to complete laboratory reports on their experimental findings as well as monthly science article critiques. Concepts covered include the study of atoms, the periodic table, moles, chemical bonding, compound nomenclature, chemical reactions and stoichiometry, characteristics of gases, solutions, and acids/bases. Outside study and work are essential to successfully complete this course.

Course Title:	Earth Science	Grade Level:	10 - 12
Prerequisite:	Biology or Honors Biology (can be taken concurrently)	Course Length:	Half-Year
Credit:	.5 Credit (Science)	Weighting:	Non-Weighted

Earth Science is a laboratory science course that explores origins and the connections between the physical, chemical, and biological processes of the earth system. Students experience the content of Earth Science through inquiry-based laboratory investigations and focus on topics associated with matter, energy, rock and minerals, plate tectonics, structure of the earth's interior, mountain building, and oceans and their margins. Laboratory work is an integral part of class.

Course Title:	Environmental Science	Grade Level:	9
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Non-Weighted

In this course students will study the patterns and processes in the natural world and their modification by human activity. To understand current environmental problems, we need to consider physical, biological, and chemical processes that are often the basis of those problems. This course includes many aspects of biology, earth and atmospheric sciences, fundamental principles of chemistry and physics, human population dynamics, and an appreciation for Earth and its natural resources. This course will survey some of the many environmental science topics at an introductory level, ultimately considering sustainability of human activities on the planet.

NOTE: There is a Mid-Term and Final in this course.

Course Title:	Honors Biology	Grade Level:	10
Prerequisite:	Environmental Science or Honors Environmental Science	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

This course will advance at an accelerated rate as compared to the traditional Biology course. Biology is the study of living things. Therefore, understanding life and life processes depends on mastering the unifying principles and concepts applicable to all life forms. The approach of this course emphasizes the fundamental unity of life forms and their diversity. The course focuses on major life processes and is arranged from simple levels of organization to complex levels. Basic chemistry, cell biology, and genetics precede information about organisms, populations, communities, and ecosystems. This honors section will include more extensive laboratory reports than the traditional biology classes.

NOTE: There is a Mid-Term and Final in this course.

Course Title:	Honors Anatomy & Physiology	Grade Level:	11 - 12
Prerequisite:	Biology and Chemistry (Chemistry may be taken concurrently)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

Note: NOTE: This course is available as a 4-credit dual enrollment course with Lackawanna College (Anatomy & Physiology I BIO 205). Additional application and cost required.

This course is an introduction to human anatomy and physiology for students planning careers in medicine or the allied health professions. Topics include body organization, body divisions and cavities, basic biochemistry, cell structure, metabolism, and histology. Structure and physiology of the following systems are included: integumentary system, skeletal system, muscular system, nervous system, and special senses. Laboratory provides students with hands-on exercises to better visualize and enhance lecture topics. The laboratory relies on dissections and/or simulated dissections to illustrate anatomical principles

Course Title:	Honors Chemistry	Grade Level:	11 - 12
Prerequisite:	Biology, Geometry and and Algebra 2 (which may be taken concurrently)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

This course is recommended for the college-prep student who plans on continuing their studies in the sciences. Chemistry is the study of matter, its properties and the changes it undergoes. This course uses laboratories, activities, and experiments to give students hands-on experience with various pieces of chemistry equipment and to solidify concepts covered in class. Students will be required to complete laboratory reports on their experimental findings as well as monthly science article critiques. Concepts covered include the study of atoms, the periodic table, moles, chemical bonding, compound nomenclature, chemical reactions and stoichiometry, characteristics of gases, solutions, and acids/bases. Outside study and work are essential to successfully complete this course. There is a summer assignment for this course.

Course Title:	Honors Environmental Science	Grade Level:	9
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

This course will advance at an accelerated rate as compared to the traditional Environmental Science course. Students will go in-depth on the current environmental problems that affect our planet. To understand the current environmental problems, we need to consider physical, biological, and chemical processes that are often the basis of those problems. This course includes many aspects of biology, earth and atmospheric sciences, fundamental principles of chemistry and physics, human population dynamics, and an appreciation for Earth and its natural resources. Through various investigations and laboratory settings, students will develop problem-solving skills that will help them in future science classes. They will also be well instructed in report writing and proper research methods in science.

NOTE: There will be a Mid-Term and Final in this course. Also, there will be some prerequisite work that will need to be completed in the summer before entering the class. The summer work will count as a grade in the first marking period.

Course Title:	Honors Organic Chemistry	Grade Level:	12
Prerequisite:	Chemistry and Honors Pre-Calculus (which may be taken concurrently)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

This course is recommended for the college-prep student. This college-level survey course is designed to serve students who need to acquire a solid knowledge of organic (or carbon) chemistry and an overview of organic chemistry concepts. It is recommended for students who plan on studying agriculture, nursing, pharmacy, medicine, dentistry, or other chemistry related field. Students planning careers in the biological sciences will also find this course beneficial. Students will learn how to name, classify, identify, and structurally model various groups of organic molecules. In addition, students will evaluate the reactivity of functional groups by predicting products of chemical reactions involving each main group of organic molecules. This class requires self-paced study outside of the classroom and a solid knowledge of general chemistry and chemical systems. There is a summer assignment requirement for this course.

There is a Final Exam in this course.

Course Title:	Honors Physics	Grade Level:	12
Prerequisite:	Chemistry and Honors Pre-Calculus (which may be taken concurrently)	Course Length:	Full-Year
Credit:	1.0 Credit (Science)	Weighting:	Weighted at 1.05

This course is recommended for the college-prep student. This course is designed to acquaint students with the physical laws governing his/her everyday existence. Students interested in pursuing careers in engineering, architecture, mathematics, computer science or related fields are encouraged to elect this course. Advanced algebraic problem-solving skills are essential in physics; therefore, a working knowledge of algebra, geometry, and advanced mathematics is highly recommended. Students will conceptually and mathematically interpret Newton's laws of motion, forces, energy, momentum, work, power, velocity, acceleration, circular motion, wave behavior, light, and sound. A weekly laboratory period will give students hands-on experience with various pieces of experimental apparatus while demonstrating physical laws and principles. In addition, standard and concise laboratory report writing will be stressed. The class requires self-paced study outside of the classroom to successfully complete this course. There is a summer assignment requirement for this course.

There is a Final Exam in this course.

Course Title:	Introduction to Astronomy and Atmosphere	Grade Level:	10 - 12
Prerequisite:	Environmental Science or Honors Environmental Science	Course Length:	Half-Year
Credit:	.5 Credit (Science)	Weighting:	Non-Weighted

An introductory lecture-laboratory course dealing with topics such as composition of the earth's atmosphere, weather in the earth's atmosphere, formation and properties of stars, gravity and the moon, the solar system, and patterns in the sky. Observational astronomy skills and critical thinking are fostered using laboratory and field activities. Lab exercises emphasize topics such as the nature and properties of light, optics, heat, mechanics, and astronomical data analysis and/or computer simulations.

Course Title:	Keystone Biology	Grade Level:	11 - 12
Prerequisite:	Environmental Science	Course Length:	Half-Year
Credit:	.5 Credit (Science or Elective)	Weighting:	Non-Weighted

This is a required course for any student who did not successfully pass the Keystone Biology Exam on their first attempt. This course emphasizes the need to meet the state assessment anchors for the Keystone Exam in Biology.

NOTE: Students will re-take the Keystone Biology Exam at the end of this course.

Social Studies Courses

Course Title:	20 th Century American History	Grade Level:	10
Prerequisite:	Civics and Government	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Non-Weighted

This course is an overview of major events and developments in American history from the turn of the twentieth century. It includes World War I, the Great Depression, World War II, the Korean Conflict, and the turbulent 1960's, all of which offered the United States challenges at home and abroad. This course is designed so students can acquire a clear sense of how America became a great industrial nation entering the 20th Century and how it continues as a current superpower.

Course Title:	American History through Film 1	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will examine key events in American History as portrayed on film. Students will analyze film for historical and literary merit. District film policy requires parental permission before students can participate. Attendance is important as video and notes from class may not be available outside of the course.

Course Title:	American History through Film 2	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will examine key events in American History as portrayed on film. Students will analyze film for historical and literary merit. District film policy requires parental permission before students can participate. Attendance is important as video and notes from class may not be available outside of the course. **Part II will examine different films than those examined in Part I.**

Course Title:	Civics and Government	Grade Level:	9
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Non-Weighted

In this course, students will learn about the principles and documents which are fundamental to governments and the rights and responsibilities of citizens. Units of study include how governments function and the relationships between local, national, and international government entities. Principles, procedures and problems of governments and residents are discussed. The testing process and projects will be less demanding than those in Honors Civics and Government.

NOTE: There is a-Required State Test

Course Title:	Consumer Economics	Grade Level:	12
Prerequisite:	World History	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Non-Weighted

We are all consumers. As a consumer, you are confronted by many decisions and choices every day. The purpose of this course is to help you become an informed consumer, so you will be able to make wise choices about “goods and services” you buy. Topics of study include comparison shopping, advertising, how to buy goods and services, budgeting, credit, using installment credit, consumer rights, supply and demand, debt, and money and its uses.

Course Title:	Contemporary Global Issues	Grade Level:	11 - 12
Prerequisite:	20 th Century American History	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

The intent of this course is to have students develop critical thinking skills in relation to the news. There will be a focus on domestic and international current events. While topics covered in class will change with the news, there will be a focus on elections during Presidential and Midterm years. In addition to the events themselves, the class will study media coverage. How coverage of an event changes with time, benefits and drawbacks of various types of media, information vs. editorial, and bias will be discussed.

Course Title:	Economics	Grade Level:	12
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Non-Weighted

This course provides students with an understanding of the science of economics, its principles, laws, and theoretical and practical applications. The American modified free enterprise system is emphasized with comparisons made to other economic systems.

Course Title:	Honors 20 th Century American History	Grade Level:	10
Prerequisite:	Civics and Government	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Weighted at 1.05

This course will study the major events and developments in American history during the 20th Century. Focus will be placed on major wars, social changes, and the transformation of the United States from reluctant participant to global superpower on the world stage. This course is designed to offer students a more advanced understanding of the time period in US history. Emphasis will be placed on analysis of primary sources, research, and writing skills.

Course Title:	Honors Civics and Government	Grade Level:	9
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Weighted at 1.05

In this course, students will learn about the principles and documents which are fundamental to governments and the rights and responsibilities of citizens. Units of study include how governments function and the relationships between local, national, and international government entities. Principles, procedures and problems of governments and residents are discussed.

NOTE: There is a Required State Test

Course Title:	Honors World History	Grade Level:	11
Prerequisite:	20 th Century American History with a recommended average of 80% or higher	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Weighted at 1.05

This course will study World History from 1450 to the present. Major topics include the Renaissance and Reformation, Political Revolutions, Industrial Revolutions, both World Wars, and the Postwar World. Students will also examine the place of the United States in world history. Political, social, cultural, and religious concepts are used to understand world development. It will be taught in a more rigorous accelerated manner. This class requires self-paced study, including homework consisting of primary source analysis and evaluation of historical arguments. A research paper is required. The goal of this class is to challenge students to study history in an analytical manner.

NOTE: There is a Mid-Term and Final in this course.

Course Title:	Modern U.S. History	Grade Level:	11 - 12
Prerequisite:	20 th Century American History	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will focus on the development of the United States from 1980 to the present. Key events covered will include the rise of Conservatism, Iran Contra, end of the Cold War, wars in Iraq, 9/11 and global terrorism, etc. There will also be a focus on the cultural history of the era including MTV, AIDS, Rodney King and the LA riots, Y2K and the Internet.

Course Title:	Pennsylvania Legislative System	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This modified civics course will immerse students in the legislative process of Pennsylvania politics. Students will learn the bill process and the roles that representatives, senators, administration, lobbyists, media, and the judicial system have on legislation.

Course Title:	Psychology	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

The semester course is designed to introduce students to the study of mental processes and behavior of themselves, humans, and animals. Students will receive a general overview of several facets of psychology. Attention will be paid to the idea that individual changes can yield positive life-long results.

Course Title:	Sociology	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will be an overview of society and both positive and negative aspects of the socializing that takes place within a school, town, state, and country. The course will include independent reading/research. Class discussion and participation will be paramount.

Course Title:	United States Geography	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

Students will learn longitude and latitude, to read a map, and the location of all 50 states. Within each location, students will study the waterways, mountains, landmarks, and climates through map-work and creative projects.

Course Title:	World History	Grade Level:	11
Prerequisite:	20 th Century American History	Course Length:	Full-Year
Credit:	1.0 Credit (Social Studies)	Weighting:	Non-Weighted

This class will study World History from 1450 to the present. Major topics include the Renaissance and Reformation, Political Revolutions, Industrial Revolutions, both World Wars, and the Postwar World. The objective of the course is to acquaint the student with the world and its development. Political, social, cultural, and religious concepts are used to understand world development.

NOTE: There is a Mid-Term and Final Exam in this course.

Course Title:	WW II and the Holocaust	Grade Level:	11 - 12
Prerequisite:	20 th Century American History	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course provides in-depth examination of the causes, personalities, major events, battles, and results of World War II and the Holocaust. Students should be in good academic standing and should have completed either a US or World History class that included the study of WW II.

Spanish Courses

Course Title:	Spanish 1	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students will learn basic vocabulary, elementary grammar concepts and proper pronunciation through reading, writing, speaking, and listening activities. Students will learn these skills through graphic organizers, DVD's, CD's, and online exercises from Encuentros I textbook.

NOTE: A cumulative project/test will be given at the end of each marking period.

Course Title:	Spanish 2	Grade Level:	10 - 12
Prerequisite:	Spanish 1	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students will continue to learn basic vocabulary while reviewing vocabulary from Spanish I. Grammar concepts will become more advanced as students speak and write not only in the present tense, but the present progressive and preterit. Graphic organizers, DVD's, CD's, and online exercises from the Encuentros I textbook, are the materials used in this course.

NOTE: A cumulative project/test will be given at the end of each marking period.

Course Title:	Spanish 3	Grade Level:	11 - 12
Prerequisite:	Spanish 2	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students will learn situational vocabulary that will assist them while traveling in a Spanish speaking country. Students will learn complex grammar concepts and be able to speak and write in additional tenses and moods. Students will use the online textbook and its CD's, DVD's, graphic organizers, and online exercises from the Encuentros II textbook.

NOTE: A cumulative project/test will be given at the end of each marking period.

Course Title:	Spanish 4	Grade Level:	12
Prerequisite:	Spanish 3	Course Length:	Full-Year
Credit:	1.0 Credit (Humanities or Elective)	Weighting:	Non-Weighted

Students will review previously learned vocabulary and grammar concepts while learning new vocabulary. An emphasis on reading comprehension and oral communication will be achieved by use of online resources, supplemental texts, CD's, DVDs, and the Encuentros II online textbook. This course encourages more independent student learning and less teacher lead instruction.

NOTE: A cumulative project/test will be given at the end of each marking period.

Technology Education, Construction, and Design Courses

Course Title:	Advanced CAD 2, 3	Grade Level:	11 - 12
Prerequisite:	CAD / Teacher recommendation	Course Length:	Full-Year
Credit:	1 Credit (Elective)	Weighting:	Non-Weighted

This course content is similar to that of CAD but grows in complexity and depth. Instruction and projects are computer based. Students will be graded on tests, quizzes, and drawings.

Course Title:	Advanced Manufacturing 1, 2, 3	Grade Level:	10 - 12
Prerequisite:	Basic Manufacturing	Course Length:	Full-Year
Credit:	1.0 Credit (Elective)	Weighting:	Non-Weighted

This course content is similar to that of Basic Manufacturing but grows in complexity and depth. More involved projects will be constructed. Students will be graded on homework, tests, quizzes, projects, and participation.

Course Title:	Basic Construction 1	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will introduce the fundamentals of residential wiring including both 120- and 240-volt circuits. Topics include wiring with two and three-strand wires of different gauges; single-pole, three, and four-way switches; standard and GFCI receptacles; electrical panels and breakers; and other basic residential wiring concepts. Hands-on techniques will be used through mock-ups and models.

Course Title:	Basic Construction 2	Grade Level:	9 - 12
Prerequisite:	Basic Construction 1	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course will introduce the fundamentals of residential plumbing using copper and PEX materials. Topics include water heaters, faucets, toilets, and tubs/showers. Students will also learn the basics of floor, wall, and roof framing. Hands-on techniques will be used through mock-ups and models.

Course Title:	Basic CAD/CAD 1	Grade Level:	10 - 12
Prerequisite:	None	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course focuses on the basic skills needed for mechanical drafting. The first part of the course focuses on developing the drawing technique used for board drawings. This includes being able to draw lines and circles, then incorporating them into different shapes to produce a drawing. The second part of the course focuses on use of computers to draw detailed drawings of objects that would be found in the real world. Students will be graded on tests, quizzes, and drawings. This course is a prerequisite for Advanced CAD

Course Title:	Basic Manufacturing	Grade Level:	9 - 12
Prerequisite:	None	Course Length:	Full-Year
Credit:	1.0 Credit (Elective)	Weighting:	Non-Weighted

This course consists of learning the fundamentals of woodworking. The student then takes these skills and applies them to a variety of projects with the first project being a shaker table. Students will be graded on homework, tests, quizzes, projects, and participation. This course is a prerequisite for Advanced Manufacturing

Course Title:	Electrical Engineering	Grade Level:	11 - 12
Prerequisite:	None	Course Length:	Quarter-Year
Credit:	.25 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. When you get up in the morning, flip a switch, and see a light turn on, you might want to thank one of the people responsible: electrical engineers. The main function of an engineer is solving problems. Electrical engineers solve problems by using electricity. They develop devices to generate and transmit electricity. In this course, students will learn the basics of circuit design and the laws and theorems involved in analyzing circuits. Students will also learn how mechanical energy is converted to electrical energy in generators and power plants. Finally, students will see that the reverse can be true – electrical energy can be converted to mechanical energy through electric motors.

Course Title:	Mechanical Engineering	Grade Level:	11 - 12
Prerequisite:	None	Course Length:	Quarter-Year
Credit:	.25 Credit (Elective)	Weighting:	Non-Weighted

This is an online course through our CAOLA system. Simple machines have been around for centuries. A machine is anything that makes work easier. Simple machines include levers and the combination of a wheel and axle. Simple machines can come together to make complex machines (e.g., a motor added to a machine allows it to work automatically). Mechanical engineers develop the machines people use daily. Mechanical engineers learn how to harness forces and energy and support loads. In this course, students will learn how to apply the laws of physics related to motion, forces, and energy. This course will give students an appreciation for the ways that structures are made and the ways that loads are supported.

Course Title:	STEM Engineering and Fabrication	Grade Level:	11-12
Prerequisite:	Engineering and Design	Course Length:	Half-Year
Credit:	.5 Credit (Math or Elective)	Weighting:	Non-Weighted

This course will consist of research of Science, Technology, Engineering, Arts, and Mathematics programs and designs in Technology Education. Activities will involve both individual and group lab work. Students will design and fabricate projects in the areas of manufacturing, mechanics, construction, and transportation. Current events and contemporary challenges in engineering and physics will be discussed. Students will complete a mass-production challenge that involves marketing and selling a product.

Course Title:	Metal Fabrication	Grade Level:	11 - 12
Prerequisite:	Basic Construction and /or Basic Manufacturing	Course Length:	Half-Year
Credit:	.5 Credit (Elective)	Weighting:	Non-Weighted

This course consists of learning the fundamentals of metal working. This may include but is not limited to sheet metal, oxy-acetylene torch, arc welding, MIG welding, lathe, milling, and forging. The student then takes these skills and applies them to a variety of projects. Students will be graded on homework, tests, quizzes, projects, and participation.

Addendum #1

Grades 6 - 12 English/Language Arts Core Course Sequences

<u>Sequence</u>	<u>Grade 6</u>	<u>Grade 7</u>	<u>Grade 8</u>	<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
Honors Sequence	Grade 6 Language Arts	Grade 7 Language Arts	Grade 8 Language Arts	Honors English 9	Honors English 10	Honors English 11	Advanced Placement Literature and Composition
Traditional Sequence	Grade 6 Language Arts	Grade 7 Language Arts	Grade 8 Language Arts	English 9	English 10	English 11	English 12
Electives					Creative Writing 1/2	Creative Writing 1/2	Creative Writing 1/2
					Greek Mythology	Greek Mythology	Greek Mythology
						Yearbook	Yearbook

- * All Advanced Placement courses are weighted at 1.10
- * All Honors courses are weighted at 1.05
- * All electives are semester courses except for Yearbook

Grades 6 - 12 Mathematics Core Course Sequences

Sequence	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Honors Sequence	Advanced Math 1	Advanced Math 2	Algebra I	Honors Geometry	Honors Algebra II	Honors Pre-Calculus	Advanced Placement Calculus (AB)
Traditional Sequence	General Math 6	General Math 7	Pre-Algebra	Algebra I	Algebra II Geometry or Math Elective	Algebra II Geometry or Math Elective	Math Elective
Paced Sequence	General Math 6	General Math 7	General Math 8	Algebra I (Part A)	Algebra I (Part B)	Geometry or Math Elective	Geometry or Math Elective

NOTE: Enrollment in the Paced Sequence is by administrative permission only.

Electives	Statistics	Statistics
	Trigonometry	Trigonometry
	STEM Eng. & Des.	STEM Eng. & Des.
	STEM Eng. & Fab.	STEM Eng. & Fab.
	Consumer Math	Consumer Math

- * All Advanced Placement courses are weighted at 1.10
- * All Honors courses are weighted at 1.05
- * The STEM elective courses are semester courses. Both courses can be for elective or math credit.
- * Algebra 2 is a pre-requisite for the Statistics, Trigonometry, and STEM courses.

Grades 6 - 12 Science Core Course Sequences

Sequence	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Honors Sequence	Grade 6 Science	Grade 7 Science	Grade 8 Science	Honors Environ. Science	Honors Biology	Honors Chemistry	Science Elective
Traditional Sequence	Grade 6 Science	Grade 7 Science	Grade 8 Science	Environ. Science	Biology	Chemistry Or Science Elective	Science Elective
Paced Sequence	Grade 6 Science	Grade 7 Science	Grade 8 Science	Environ. Science	Biology	Applied Chemistry Or Science Elective	Science Elective
Electives					Astronomy	Astronomy	Astronomy
					Earth Science	Earth Science	Earth Science
						Honors Anatomy & Physiology	Honors Anatomy & Physiology
							Honors Physics
							Honors Org. Chemistry

NOTE: Enrollment in the Paced Sequence is by administrative permission only.

- * All Advanced Placement courses are weighted at 1.10
- * All Honors courses are weighted at 1.05
- * Astronomy and Earth Science electives are semester courses. Anatomy & Physiology, Physics, Organic Chemistry electives are full-year courses.
- * Geometry is a prerequisite for Chemistry but can be taken concurrently
- * Algebra 2 is a prerequisite for Honors Chemistry but can be taken concurrently

Grades 6 - 12 Social Studies Core Course Sequences

<u>Sequence</u>	<u>Grade 6</u>	<u>Grade 7</u>	<u>Grade 8</u>	<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
Honors Sequence	Grade 6 Social Studies	Grade 7 Social Studies	Grade 8 Social Studies	Honors Civics and Government	Honors 20th Century American History	Honors World History	Economics
Traditional Sequence	Grade 6 Social Studies	Grade 7 Social Studies	Grade 8 Social Studies	Civics and Government	20th Century American History	World History	Economics or Consumer Economics
Electives				US Geography	US Geography	US Geography	US Geography
				PA Legislative System	PA Legislative System	PA Legislative System	PA Legislative System
				American History Through Film 1/2	American History Through Film 1/2	American History Through Film 1/2	American History Through Film 1/2
					Psychology	Psychology	Psychology
					Sociology	Sociology	Sociology
						WW II and Holocaust	WW II and Holocaust
						Modern U.S. History	Modern U.S. History
						Contemporary Global Issues	Contemporary Global Issues

* All Advanced Placement courses are weighted at 1.10

* All Honors courses are weighted at 1.05

* All electives are semester courses

Career Pathways Overview

Business and Finance Career Pathway Course Sequence:

	Grade 9	Grade 10	Grade 11	Grade 12
Semester One	Introduction to Business I/II	Accounting	Entrepreneurship and Marketing	International Business
Semester Two	Introduction to Business I/II	Business and Personal Law	Financial Literacy	INTERNSHIP (Optional)

Computer Technologies Career Pathway Course Sequence:

	Grade 9	Grade 10	Grade 11	Grade 12
Semester One	Principles of Information Technology 1a *	Coding	JavaScript *	Network System Design *
Semester Two	Principles of Information Technology 1b *	Introduction to Java Programming *	Web Page Design	INTERNSHIP (Optional)

Construction and Design Career Pathway Course Sequence:

	Grade 9	Grade 10	Grade 11	Grade 12
Semester One	Basic Construction 1	CAD	Electrical & Mechanical Engineering *	Metal Fabrication
Semester Two	Basic Construction 2	Advanced CAD 2-3	STEM Engineering and Fabrication	INTERNSHIP (Optional)

Health and Human Services Career Pathway Course Sequence:

	Grade 9	Grade 10	Grade 11	Grade 12
Semester One	Introduction to Careers in Health Sciences *	Psychology	Health Science Foundations 1b *	Introduction to Nursing (B) *
Semester Two	Introduction to Human Services *	Health Science Foundations 1a *	Introduction to Nursing (A) *	INTERNSHIP (Optional)

* Denotes online courses through our CAOLA system

PA GRADUATION REQUIREMENTS - ACT 158

Students who will graduate from high school in 2023 and beyond now have additional options to meet the statewide graduation requirement.

Act 158 of 2018 (Act 158), which was signed into law on October 24, 2018, expands upon the options that students have for meeting Pennsylvania's graduation requirements. While Act 158 maintains that students will still be required to take the Keystone Exams for federal accountability purposes, students may not be required to achieve proficiency on the Keystone Exams in order to graduate, as long as they meet the requirements set forth by one of the following defined options.

These options, which are outlined below, apply to students who will graduate in 2023 and beyond.

KEYSTONE PROFICIENCY PATHWAY

Student must earn a proficient or advanced score on all three Keystone Exams: Algebra, Literature, and Biology.

KEYSTONE COMPOSITE PATHWAY

Student must earn a composite score of 4452 on the Algebra, Literature, and Biology Keystone Exams. Student must also earn a proficient or advanced score on at least one of the three exams. The student may not earn a Below Basic score on either of the other two exams.

ALTERNATE ASSESSMENT PATHWAY

Student must earn a passing grade in the course(s) associated with each Keystone Exam on which the student did not earn at a proficient or advanced score. These courses include: Algebra I or Algebra I-B, English 10, and Biology. Student must also achieve one of the following:

- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB);
 - SAT: 1010
 - PSAT: 970
 - ACT: 21
 - ASVAB: the minimum score required for admittance to the armed services branch during the year the student graduates
- Gold Level on the ACT WorkKeys Assessment;
- Attainment of at least a '3' score on an Advanced Placement Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve a proficient or advanced score;

- Successful completion of a concurrent enrollment course (ex. college-in-high school course, dual enrollment course) in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;
- Successful completion of a pre-apprenticeship program; or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

EVIDENCE BASED PATHWAY

Student must earn a passing grade in the course(s) associated with each Keystone Exam that a proficient or advanced score was not earned. These courses include: Algebra I or Algebra I-B, English 10, and Biology. Student must also demonstrate three pieces of evidence consistent with the student's goals and career plans, including:

- One of the following:
 - Attainment of an established score on the ACT WorkKeys assessment (Silver Level), a SAT subject test (score of 630), an Advanced Placement Program Exam (score of 3);
 - Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework;
 - Attainment of an industry-recognized credential; or
 - Successful completion of a concurrent enrollment or postsecondary course; and
- Two additional pieces of evidence, including one or more of the options listed above, or: satisfactory completion of a service learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

CTE PATHWAY

Students, who are Career and Technical Education (CTE) Concentrators, must earn a passing grade in the course(s) associated with each Keystone Exam on which a proficient or advanced score was not earned. These courses include: Algebra I or Algebra I-B, English 10, and Biology. Student must also attain an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study. For further explanation of the CTE Pathway, please see PDE's ACT 6 Guidance.