

2025-2026

Foreword

The Mission of the Farrell Area School District is to work collaboratively within the community to foster a dynamic standards-based curriculum within a safe, educationally managed environment. Facilitated by a caring professional staff, opportunities abound for all students to become actively engaged as productive, responsible life-long learners empowered to meet the global changes and needs of a culturally diverse society.

Within this handbook are the courses available at Farrell Area High School along with a description for each. This handbook is a guide to your academic path while at Farrell Area High School. Discuss your future goals with those whom you respect and whose opinions you value. Keep in mind that the educational path you select now will greatly influence your future. By carefully reviewing this handbook, you will have the opportunity to select the courses that will best assist you in obtaining your goals.

Non-discrimination Policy of the Farrell Area School District

The Farrell School District is an equal opportunity education institution and will not discriminate based on sex, race, color, national origins, religion, marital status or handicap in its activities, programs or employment policies as required by Title IX, Title VI and Section 504.

For information regarding services, activities, programs and facilities that are accessible to and usable by handicapped persons, contact Mrs. Keirnan Grill, Director of Special Education Services at (724) 509-1216.

IMPORTANT...PLEASE NOTE.

INTRODUCTION...Parents/Guardians and students...Please read

The courses and programs outlined in the following pages of this booklet are designed to provide you a well-rounded and challenging education. All decisions regarding course structure, curriculum design, assessment and planning are taken very seriously. The FASD staff and administration have spent significant time planning and implementing these decisions. Please take time to review the process and understand that student success is paramount.

IMPORTANT: STOP – PLEASE NOTE - SCHEDULE WISELY

Decisions reached by you and your parents in course selection will be considered a firm commitment with the school. Course changes in the fall of the school year are discouraged.

NOTICE: DROPPING/ADDING AN ELECTIVE WILL ONLY BE ALLOWED IF THE CHANGE WILL NOT AFFECT YOUR CORE COURSES. *(Specific questions relating to program options or course selections should be addressed to the guidance counselor.)

*Careful thought and consideration should be given to the selection of challenging and rewarding courses for the 2025-2026 school year. Decisions about course selections are important due to their long-range effects on educational and occupational opportunities.

*NO SCHEDULE CHANGES WILL BE MADE AFTER THE FIRST 2 WEEKS OF SCHOOL UNLESS THERE ARE EXTENUATING CIRCUMSTANCES AND THE PRINCIPAL APPROVES.

Student requests for schedule changes may require parent signatures. School officials reserve the right to place a student in a class or classes they regard as appropriate for that student if he or she is uncertain or unrealistic about his/her interests and/or abilities. Should there be insistence by the parents/guardians to place a student in a course deemed by school officials to be inappropriate, parents/guardians will be asked to sign a statement which states their insistence of placement other than that deemed appropriate by school personnel and accepting any liability for this decision.

Farrell High School Graduation Requirements

Class of 2024 & Beyond

- 4 English credits
- 4 Social Studies credits
- 4 Math credits
- 3 Science credits
- 1 PE credits
- .5 Health credit
- .5 Personal Finance credit
- 2 Years of a Foreign Language
- 4 Elective credits
- 1 Graduation Project credit

24 Total Credits Required for Graduation

Required Electives Per FASD:

Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Study Skills/Life Management	Careers 8	Keystone Prep	Health	Careers 11	Personal Finance

All courses listed are in the suggested progression, however, there may be circumstances where courses will be taken out of the suggested order. Each course is .5 credits.

Students will need to have earned the following number of credits to be promoted to each grade level:

10th Grade	11th Grade	12th Grade
5 credits	10 credits	15 credits

2025-2026 Farrell Upper Middle/ High School PROPOSED COURSES

English/Language Arts:

Academic/Career Track	Honors Track	Language Arts Electives	
English 7	English 7 Honors	Photo-Journalism 1 & 2	Creative Writing
English 8	English 8 Honors	The Language of Activism	
Reading 7	Reading 7 Honors		
Reading 8	Reading 8 Honors		
English 9	English 9 Honors		
English 10	English 10 Honors		
English 11	English 11 Honors*		
English 12	English 12 Honors*		

Mathematics:

Academic/Career Track	Honors Track	
Math 7	Pre-Algebra	
Math 8	Algebra I	
Algebra I	Algebra II	
Algebra II	Geometry	
Geometry	Algebra III: Pre Calc and Trigonometry*	
College Prep Financial Algebra	AP Calculus	

Science:

Academic/Career Track	Honors Track	Science Electives	
Science 7	Science 7	Chemistry I / Lab	Chemistry II / Lab
Science 8	Science 8	Biology II & Anatomy & Physiology	Physics/ Lab
Science 9	Biology I/Lab	AP Biology	Forensics
Biology I/Lab	Chemistry I/Lab	Environmental Science	
Chemistry in the Community	Science Elective Credit		
Science Elective Credit Science Elective Credit			

Social Studies:

Course Track	Social Studies Electives		
Geography/PA History 7	Speech and Debate	Current Events	
World Cultures 8	Psychology		
American History			
African American History 10			
World History			
Government and Civics			

Foreign Languages:

SPANISH TRACK	FRENCH TRACK		
Spanish 1	French 1		
Spanish2	French 2		
Spanish 3	French 3		
Spanish 4	French 4		

Students will start taking a language in their 9th grade year. FASD requires at least two years of a language (can be 1 of each level 1 class or 2 consecutive levels of the same language).

Health and Physical Education:

Required Courses	Physical Education Electives		
Health	Physical Fitness and Wellness	Strength and Fitness	
General Physical Education	Advanced PE	Advanced Swimming	

Electives:

Middle School (Grades 7 & 8) Electives	High School (Grades 9-12) Evectives	
Middle School Band	Family and Consumer Science I	Media Productions
Middle School Chorus	Family and Consumer Science II	S.T.E.A.M.

Art 8	FCS International Foods	Manufacturing and Design
Intro to Family Consumer Science	FCS Fashion and Design	Robotics
7 th STEAM-Developing the Innovator Mindset	FCS Child Development	Introduction to Computer Programming
	High School Band	AP Computer Science Principles
	High School Chorus	
	Art 1	
	Art 2	
	Art Projects	

Advanced Placement Courses

Advanced placement courses are offered in the area of Math and Science. These courses are offered to those students who are academically qualified, have teacher recommendations, and are recognized as needing the challenging experience. Most colleges grant credit for participation in advanced placement courses when the student achieves college level standards on the required A.P. examination. All students taking an AP course are required to take the respective AP Exam upon course completion.

College-in-the-High School (CHS)

College-in-the-High School courses are college-level classes taught by Farrell Area High school teachers during the regular student schedule. The curriculum for these courses are reviewed by the college or university, and the teacher credentials are approved by the college or university. Students who successfully complete these courses can receive college credit through the approved college or university. Farrell Area High School students are scheduled for CHS courses in a similar way as all other Farrell Area High School courses. All CHS courses are marked with an asterisk (*).

YEAR LONG		
HS Course Title	SHU Course #	SHU Title
AP Biology (03056)	SBL150-68	General Biology I
AP Biology Lab (03056)	SBL151-69	General Biology I Laboratory
English 11 Honors (175)	SEL150-53	Introduction to English Studies
English 12 Honors (185)	SEL151-5B	Topics in Literature
Algebra II/Trigonometry	SMA120-68	Precalculus

Dual Enrollment

Prerequisite: 11th and 12th grade students. Attendance and behavior will be evaluated in the application process.

Dual enrollment is described as an opportunity that allows high school students to earn college credits for courses they have taken through a postsecondary institution while attending high school. Students will have to apply and be accepted to the college/university during the spring of their 10th or 11th grade year. The School Counselor, the student, and the family will work together to schedule Dual Enrollment courses; however, the university may have additional requirements that must be completed by the student. Transportation to and from campus will be the responsibility of the student/family. Tuition will be paid for from FASD, but the cost of books/course materials is the responsibility of the student/family. A passing grade of at least a 75% or higher will be required to enroll for consecutive semesters. The School Counselor will schedule classes at FHS to accommodate the times and dates of the Dual Enrollment courses. Students will receive one high

school credit for each dual enrollment course. Please see the Dual Enrollment form in appendix ## for additional requirements and information.

Independent Study

An Independent study class is at the discretion of the guidance counselor, teacher, and the school principal and is only available for courses that are graduation requirements. Students must have exhausted all other learning opportunities in the subject that they wish to do an independent study, or have it determined that the subject will not fit into the student's schedule any other way. Independent Study will be the responsibility of the student to communicate with the teacher and completion of all assignments.

Chapter 4 Requirements

The High School Graduation Project Requirement

According to the Pennsylvania Department of Education Regulations

SEC 4.24 HIGH SCHOOL GRADUATION REQUIREMENTS

(A) Each school district (including charter schools) shall specify requirements for graduation in the strategic plan under 4.13 (relating to strategic planning). Requirements shall include course completion and grades, completion of culminating project and results of local assessments aligned with academic standards.

...The purpose of the culminating project is to assure the students are able to apply, analyze, synthesize and evaluate information and communicate significant knowledge and understanding...to establish rigorous academic standards and assessments to facilitate the improvement of student achievement and to provide parents and communities a measure by which school performance can be determined...prepare students for adult life by attending to their intellectual and development needs...at their highest level possible [so they]...can become self-directed, life-long learners and responsible, involved citizens.

Objective of Graduation Project Requirement

In order to graduate from Farrell Senior High School, every student must satisfactorily complete a graduation project as required by the Pennsylvania Department of Education Regulations. The Farrell Area School District feels the learning provided by this experience should be a part of every student's educational career. The project should demonstrate the district's high standard of student performance and involve the student in problem solving, self-directed learning, decision making, public speaking, and individual research while investigating a specialized area of interest.

Late Entry Students

Students who enroll in Farrell High School after the 4th nine weeks of any year may have adapted due dates for some or all aspects of the senior project, depending upon the student's arrival and abilities. This adaptation will be considered on an individual basis with the student. Students should recognize that they are best served by attempting to complete work as soon as possible.

The graduation project rubric is included on the next page.

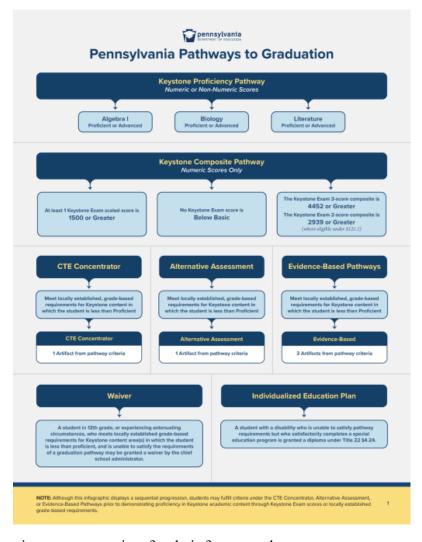
	OUTSTANDING (4)	SATISFACTORY (3)	NEEDS IMPROVEMENT (2)	UNSATISFACTORY (1)
ANALYSIS	Provides substantial analysis of career research and project. Provides new information for the evaluator.	Provides adequate analysis of career research and project. Provides new information for the evaluator. (4 examples given)	Provides some adequate analysis of career research and project. Provides some new information for the evaluator.	Provides little to no analysis of career research and project. Does not provide new information for the evaluator.
UNDER- STANDING	Demonstrates a deep knowledge of their research.	Demonstrates adequate knowledge of their research. (Able to answer 4 questions)	Demonstrates some knowledge of their research.	Demonstrates little to no knowledge of their research.
PREPARATION	Has come to the presentation prepared, with all necessary materials and technology integration.	Has come to the presentation prepared, with all necessary materials and technology integration. (No more than one technology issue)	Has come to the presentation somewhat prepared, with some materials and technology integration.	Has not come to the presentation prepared, little to no materials and technology integration.
NONVERBAL COMMUNICATION SKILLS	Dress and grooming is polished. Uses sophisticated non-verbal techniques. Efficiently utilizes space.	Dress and grooming is appropriate for a formal presentation. Uses appropriate non-verbal techniques. Efficiently utilizes space.	Dress and grooming is adequate for a formal presentation. Uses some nonverbal techniques. Adequately utilizes space.	Dress and grooming is not suitable for a formal presentation. Uses little to no, or inappropriate non-verbal techniques. Does not utilizes space.
EVIDENCE	Complete rationale of why they selected their career and project choices. Almost always refers to specific examples from their research.	Rationale of why they selected their career and project choices. Refers to specific examples from their research. (4 examples)	Attempts rationale of why they selected their career and project choices. Little reference to specific examples from their research.	No attempt of rationale of why they selected their career and project choices. Little to no reference to specific examples from their research.
FLUENCY/USE OF STANDARD ENGLISH	Consistently uses standard English and sophisticated vocabulary; makes few if any errors, and always self-corrects. Avoids verbal fillers.	Frequently uses standard English and appropriate vocabulary; makes few errors, and frequently self-corrects. Uses some verbal fillers.	Attempts to use standard English and some appropriate vocabulary; makes several errors, and rarely self-corrects. Frequently uses verbal fillers.	Little attempt to use standard English and appropriate vocabulary; makes numerous errors, and does not self-correct. Consistently uses verbal fillers.

Total from rubric

Pennsylvania Department of Education Graduation Pathway Requirements

Effective with the graduating class of 2023, Pennsylvania high school students are required to demonstrate their postsecondary preparedness and meet statewide requirements through one of five Pathways to Graduation.

For the purposes of federal accountability, students enrolled in Commonwealth public schools must participate in the Keystone Exams (end-of-course assessments in Algebra I, Literature, and Biology). Proficiency on the three Keystone exams is the preferred graduation pathway for all Farrell Area High School students. The other four pathways are included in the graphic below: Keystone Composite, CTE Concentrator, Alternative Assessment, and Evidence-Based Pathways. The School Counselor will work with students to determine which graduation



pathway is most appropriate for their future goals.

College Bound Students and Student Athletes

Many selective colleges across the country require a *lab science* and 2-3 years of a *foreign language*, and at least 3 years of regular education *math* on the student's academic record in addition to the standard number of core academic courses (those that are academic in nature, excluding vocational and career courses). Please use these considerations in determining future schedules. Also, remember to check with the colleges/technical/trade schools that you are interested in regarding their admission requirements. It is extremely important to explore post-secondary admission requirements early on in high school to prevent inadequate preparation for admission.

NCAA (National Collegiate Athletic Association) and college admission standards are constantly subject to change. Therefore, it should be advised that *college bound students*, especially those who are considering playing college athletics, are required *16 core regular education courses* and a *lab science* to be eligible for their freshman year. In order to participate in Division I or II athletics, students MUST register with the NCAA. They may do this by referring to the following website: www.web3.ncaa.org.

Language Arts Courses

English 9 1 Credit Grade 9

Prerequisite: Promotion from 8th Grade to 9th Grade

Course Description:

This course is designed to be an introduction to high school English and oral presentations. Emphasis will be placed on reinforcing the Common Core State Standards and eligible content. Areas of concentration will include, but are not limited to, analyzing author's purpose, voice, tone, and mood and citing evidence from the text to reinforce ideas. Writing will be emphasized and centered on the argumentative or position paper using the Writing Assessment Domain Scoring Guide, which encompasses focus, content, organization, style and conventions. Students will refine skills related to responding, explaining and assessing literature. Students will learn the required skills for success in High School English.

English 9 Honors 1 Credit 1.1 Weight Grade 9

Prerequisite: Teacher recommendation and proficient completion of English 8 with an 85% or higher, and a minimum of a proficient score on the PSSA ELA Exam

Course Description:

This course is a survey of writing and literature designed for students who would like to be challenged beyond the average English class. Though this course covers all the basic components of English 9, honor students will delve deeper into the assigned readings, employing critical thinking and analytical skills. In addition to the material covered in English 9, students will be exposed to a variety of additional literature from all genres and will also be expected to complete independent readings.

English 10 (Keystone Exam Course)

1 Credit Grade 10

Prerequisite: Successful completion of English 9

Course Description:

In this course the students study literature from around the world. Each unit focuses on critical thinking, relationships between the literature itself and universal questions. Students are introduced to myths, fables, science fiction, and short stories with an emphasis in world literature. Oral communication will focus on speech, content and delivery. This outline is subject to change and assignments will vary, depending on the student's previous experience and learning abilities. This course also meets the needs of learning support students.

At the end of this course, students are expected to demonstrate satisfactory performance on the Literature Keystone Exam.

English 10 Honors (Keystone Exam Course) 1.1 Weight

1 Credit Grade 10

Prerequisite: Teacher Recommendation and 85% or better in English 9

Course Description:

This course will cover all aspects of English 10. In addition, Honor students will read supplementary classical novels and plays to ensure students further develop literary analysis skills. Students will complete a variety of informational, persuasive, and creative writing projects.

English 11 1 Credit Grade 10

Prerequisite: Successful completion of English 10

Course Description:

In this course, students will cover various pieces of Contemporary World Literature. Emphasis will be placed on drama and prose genres; however, students will cover non-fiction, novel and poetry as well. Students will be expected to master concepts in literature such as plot, setting, character development, theme, point of view, mood and tone. Additionally, controversial issues addressed by these works and other contemporary pieces are debated through oral and written pieces created by the students throughout the year. In their essays and discussions, students may relate a work to its historical or social circumstances, trace a symbol through a work or works, or consider a moral or philosophical question. This course highlights grammar and composition, with additional emphasis placed on the Pennsylvania Writing Assessment Domain Scoring Guide. Students will also complete and present a research project using MLA format with appropriate documentation. Students enrolled in this course must demonstrate satisfactory performance on the Literature Keystone Exam.

English 11 Honors* 1 Credit
1.2 Weight Grade 11

Prerequisite: Teacher Recommendation. 85% or better in English 10 Honors and a minimum of a Proficient score on the Literature Keystone Exam

Course Description:

This course is designed for juniors who are preparing to attend a four-year university. The course is College-in-the-High School through Seton Hill University, and students may receive college credit for successful completion of the course. American literature is surveyed historically with a detailed study of selected prose or poetry of the specific period. Mechanical skills and grammar concepts are studied through the student composition, which will employ the standard manuscript format and utilize the criteria of a good paragraph. A research paper is also written using a standard format and varied research techniques and sources.

English 12 1 Credit Grade 12

Prerequisite: Successful completion of English 11

Course Description:

This course is designed to provide an analytic and historical study of British, World, and Modern Literature with a central focus on heroes and mythology to promote literary study. Additionally, controversial issues addressed by these works and other contemporary pieces are debated through oral and written pieces created by the students throughout the year. In their essays and discussions, students may relate a work to its historical or social circumstances, trace a symbol through a work or works, or consider a moral or philosophical question. Research skills will be an integral part in this course. Students are expected to master MLA format and will be introduced to APA format. Speech communication will also be covered.

English 12 Honors* 1 Credit 1.2 Weight Grade 12

Prerequisite: Teacher Recommendation. 85% or better in English 11 Honors or 95% or better in English 11 and a minimum of a Proficient score on the Literature Keystone Exam *Course Description:*

This course is designed for seniors who are preparing to attend a four-year university. The course is College-in-the-High School through Seton Hill University, and students may receive college credit for successful completion of the course. This course views the literature, including drama, poetry, and prose of the Western and British world from both broad historical and thematic perspectives. Additionally, controversial issues addressed by these works and other contemporary pieces are debated through oral and written pieces created by the students throughout the year. In their essays and discussions, students may relate a work to its historical or social circumstances, trace a symbol through a work or works, or consider a moral or philosophical question. Students are expected to master MLA format and will be introduced to APA format. Speech communication will also be covered. Advanced analytical thinking and writing skills will be stressed, with emphasis placed on a range of in-class and take-home analytical essays. A mastery of writing skills is imperative. Students are also expected to participate in class discussions.

Language Arts Electives

Photojournalism 1

1 Credit Grades 9-12

Prerequisite: Written recommendation and a 70% average in their English classes. *Course Description:*

This course is designed to produce a quarterly newspaper periodical, *Steeler Nation* and the annual school yearbook. This course will highlight knowledge of current and school events. An emphasis is placed on APA writing style, grammar and mechanics, and strong written and oral communication skills. Students will be expected to interact through participation in whole class discussions of news topics, working in small groups, and informally assisting one another in various aspects of news production. Students will also learn to effectively compose their photos using the rule of thirds, horizon lines, balance, grouping, leading lines, and framing. Students will learn to manipulate digital images they have taken using various different types of software. Students will become skilled at writing captions for photos they have taken and incorporate those photos into a major school publication.

Photojournalism 2

1 Credit Grades 10-12

Prerequisite: Photojournalism 1

Course Description:

This course is designed for students who have successfully completed photojournalism 1. Students will be expected to use their knowledge and skills from photojournalism 1 to enhance the school newspaper and yearbook. Students may be tasked with taking on the role as editor.

CREATIVE WRITING:

.5 Credit Grades 10-12

Prerequisites: None *Course Description:*

Creative Writing will give students the opportunity to explore a variety of approaches to craft and style while developing their discipline as writers. Our class time will be devoted in part to a daily writing regime and guided explorations of styles and techniques in a variety of writing genres. Students will get opportunities and encouragement to share their writing with larger audiences through workshops, performance, and publication opportunities. We will read and discuss contemporary masters and their works of poetry, fiction, non-fiction, stage-plays, and film. By the end of this course students will have created a digital portfolio of their work as a graded cumulative assignment at the end of the semester.

THE LANGUAGE OF ACTIVISM

.5 Credit Grades 10-12

Prerequisites: None *Course Description:*

The Language of Activism course explores the role that literature, language, writing and the media have had in social justice movements throughout American history from the American Revolution, Abolition, Women's Rights, Labor, Civil Rights, Anti-War, LGBTQ+, to current-day activism. Students will gain an understanding of the role of writing and communication in bringing about social change and of how various social movements have impacted human history. Furthermore, students will be introduced to some of the nation's most influential activists and their ideas and will draw comparisons to various social movements. Students will analyze primary sources including articles, letters, speeches, poetry, songs, photographs, and political cartoons while developing skills in critical thinking, close reading, public speaking, research, analysis, and writing.

Math Courses

Academic Algebra 1 Credit Grades 9-10

Prerequisites: Students enrolling in this class shall have completed Math 8 with a 75% or lower or have a Basic or Below Basic score on the PSSA Test.

Course Description:

Academic Algebra is a curative course to develop students' fluency with linear, quadratic and exponential functions. The critical areas of instruction involve deepening and extending students' understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. In addition, students engage in methods for analyzing, solving, and using exponential and quadratic functions. Some of the overarching ideas in the Algebra I course include the notion of function, solving equations, rates of change and growth patterns, graphs as representations of functions, and modeling.

Algebra I (Keystone Exam Course)

1 Credit Grades 8 – 11

Prerequisites: Successful completion of Academic Algebra or being Proficient or Advanced on the 8th Grade PSSA or teacher recommendation

Course Description:

This course is the foundation for high school mathematics. It is the bridge from the concrete to the abstract study of mathematics. Topics to be covered include simplifying expressions, evaluating and solving equations, inequalities, variables, order of operations, evaluating expressions, properties of real numbers, adding, subtracting, multiplying, and dividing real numbers, solving equations and inequalities, rates, ratios, percent, and proportions, writing and graphing functions, linear functions, polynomials, scientific notation and properties of exponents, central tendency, histograms, box and whisker plots, permutations and combinations, and theoretical and experimental probability.

Students enrolled in this course must demonstrate satisfactory performance on the Algebra I Keystone Exam and submit a portfolio/notebook.

Algebra II 1 Credit Grades 9-12

Prerequisites: Successful completion of Algebra I

Course Description:

This course is a continuation of Algebra I. Topics to be covered include properties of real numbers, solving equations and inequalities, functions, equations, and graphs, linear systems, quadratic equations and functions, polynomials and polynomial functions, radical and rational exponents, sequence and series, probability and statistics, matrices, exponential and logarithmic functions, and rational functions.

Geometry 1 Credit
Grades 10-12

Prerequisites: Successful completion of Algebra II

Course Description:

This course develops a structured mathematical system employing both deductive and inductive reasoning. It includes plane, spatial, coordinate, and transformational geometry. Algebraic methods are used to solve problems involving geometric principles. Topics include, but not limited to measurement, area, properties of polygons, parallel and perpendicular lines, triangles,

quadrilaterals, calculations of area and volume, and formal and informal proof, simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. This course teaches the student to form mental pictures of geometric figures and learn about various features of those figures.

College Preparatory Financial Algebra

1 Credit Grade 12

Prerequisites: Completion of Algebra I, Algebra II, and Geometry *Course Description:*

The course will focus on performing operations on sets and Venn diagrams and solving problems utilizing set operations. Students will demonstrate the ability to compute probabilities of disjoint and dependent events, including a survey of probability distributions. Students will review and apply mathematical operations with whole numbers, decimals, fractions, ratios, and percent. They will understand terminology relating to personal and business mathematics applications. Students will use common mathematical formulas to solve a variety of personal and business mathematics as well as apply knowledge of computer and calculator use.

Algebra III: Trigonometry/Pre-Calculus*

1

Credit

1.2 Weight Grades 11-12

Prerequisites: Successful completion of Geometry

Course Description:

The course is College-in-the-High School through Seton Hill University, and students may receive college credit for successful completion of the course. This course is to prepare students for study of higher-level mathematics. Topics covered include advanced algebraic and trigonometric topics: polynomial, exponential, logarithmic, rational, radical, and trigonometric functions, their graphs, and applications. A graphing calculator (TI-83 or 84) is REQUIRED.

Calculus 1 Credit 1.2 Weight Grade 12

Prerequisites: 75% or better in Algebra III/Trigonometry or Teacher Recommendation *Course Description:*

This course is for college bound students who plan on pursuing a math related career. Students are expected to spend a great deal of time on outside preparation, as homework assignments are very time consuming. Students will communicate mathematical solutions both orally and with the written word; use technology to help solve problems, interpret results, and verify conclusions; and determine the reasonableness of solutions. A graphing calculator (TI-83 or 84) is REQUIRED.

Science Courses

Science 9 1 Credit Grade 9

Prerequisite: Students who were Proficient, Basic, or Below Basic on their 8th Grade Science PSSA Test

Course Description:

Ninth grade science is an integrated science course that provides students with laboratory experiences, furthers their fundamental science inquiry skills and exposes them to a variety of science topics with an emphasis in foundational content for the Keystone Biology Assessment. Major areas of study will come from the sciences of Chemistry (water, changes in matter, chemical energy, and organic polymers), Biology (cells and organ systems diversity) and Ecology. The course will continue to develop students' confidence in the study of science and to develop their science literacy. Science 9 includes the following components: laboratory experiences, scientific methods and application of technology.

Biology (Keystone Exam Course)

1 Credit Grades 9-10

Prerequisite: Students who attain an Advanced status on their 8th Grade Science PSSA test or the successful completion of Science 9

Course Description:

Explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on two general biological principles:

- a) Cells and cellular processes
- b) Continuity and unity of life

This course introduces the diversity of living organisms, their structure, function, and evolution. Lectures, discussions, dissections, note taking, projects, and laboratories are also part of the course. At the end of the course students will be administered the PA Keystone Biology Exam.

Biology II 1 Credit Grades 10–12

Prerequisite: Students who have successfully completed Biology, Chemistry and Physics *Course Description:*

The course is for those interested in science-related fields. Anatomy and physiology is a discussion and laboratory based study of the human body. The study will range from molecules, cells, body systems, and processes. Dissection of a mink and other appropriate organs will compliment course work. This course is designed for college preparation, especially for biology and health career majors. This course includes laboratory work, study of specimens, projects, and a thorough understanding of scientific inquiry. Students should be prepared to conduct projects and write a formal lab report. Instruction centers around inquiry based learning that is incorporated into class activities. Learning activities include teacher-lead instruction, group work, student seatwork, project-based learning, and lab exercises with both student-choice and teacher-choice grouping. Students can expect to start each day with a bell ringer assignment/quiz followed by learning activities and/or lecture. Students will *often* work independently from the teacher in order to achieve student autonomy expected of upper school students. Classes are structured to utilize every minute for learning and assessing understanding. Real world application is a daily objective. Higher-level thinking will be incorporated into each lesson as well as use of technology when applicable to increase student achievement. Students are expected to participate in all activities

and actively engage and ask questions during teacher-led lectures. Students are also expected to review and study the content covered in class outside of school *daily*.

AP Biology / Lab*
1.5 Credits
1.2 Weight Grades 10-12

Prerequisite: Students who attain a Proficient status on their Keystone Exam or the successful completion of Biology

Course Description:

The course is College-in-the-High School through Seton Hill University, and students may receive college credit for successful completion of the course. AP Biology is designed to offer students a solid foundation in introductory college-level biology. By structuring the course around the four big ideas, enduring understandings, and science practices we assist students in developing an appreciation for the study of life and help them identify and understand unifying principles within a diversified biological world. AP biology is a full year designed to be the equivalent of an introductory biology course taken in college. AP biology differs from the typical high school biology course with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work performed by students, and the time and effort required of the students. AP biology is a rigorous course that demands personal responsibility from the student. To help students plan effectively, they are provided with due dates for all exams, labs, and assignments. Students are strongly encouraged to complete all assigned reading and review lecture notes from class on their own time.

AP biology includes topics covered in an introductory college biology course. The textbook used and labs done in AP biology are equivalent to those done by college students majoring in biology. AP Biology is a course that aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to think critically in the rapidly changing science of biology and to prepare students for the Biology College Board Advanced Placement Exam in May of next year. In order to pass the exam (usually this is with a score of 3 or higher), students must be highly motivated and driven to excel in this challenging course. The format for this class will be primarily lecture and lab, supported by interactive activities.

Laboratory Requirement

This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students should be able to describe how to collect data, use data to form conclusions, and apply their conclusions to larger biological concepts. Students should report recorded data and quantitative conclusions drawn from the data with appropriate precision (i.e., significant figures). Students should also develop an understanding of how changes in the design of the experiments would impact the validity and accuracy of their results. Many questions on the AP exam are written in an experimental context, so these skills will prove invaluable for both concept comprehension and exam performance.

Prerequisite: Completion of Biology

Course Description:

Chemistry in the community is a full-year science course. The program offers a motivational, engaging approach to the study of chemistry for a wide range of students. The course is designed to use chemistry knowledge to think through and make informed decisions about issues involving science and technology. By the end of the year students will be able:

- to recognize and understand the importance of chemistry in daily life
- to develop problem-solving techniques and critical thinking skills
- to acquire skills in the chemical laboratory techniques
- develop an understanding in atom structure, chemical bonding, reactions, and organic chemistry.

This course is recommended for students who do not necessarily desire to further their education either in a technical or degree program after high school. This course is more for a better understanding of chemical processes that occur in life experiences. Participation in this Basic Chemistry course will require the student to utilize mathematics and a strong background is recommended. You will be required at times to use a calculator. You need to have your own. A graphing calculator (TI-83 or 84) is SUGGESTED.

Chemistry/Lab
1.5 Credit
1.1 Weight Grades 10-12

Prerequisite: Students who have completed Biology with a 75% or better

Course Description:

This course is recommended for students who desire to further their education either in a technical or degree program after high school. Participation in this Chemistry course will empower the student to utilize mathematics and laboratory exercises to explain the importance of measurements, energy, and structure of matter, bonding, solutions, electrochemistry, equilibrium, and biochemistry. You will be required at times to use a calculator. **You need to have your own.** A graphing calculator (TI-83 or 84) is SUGGESTED.

Chemistry II 1 Credit
1.2 Weight Grades 10–12

Prerequisite: Students who have successfully completed Biology, Chemistry and Physics *Course Description:*

This course is a scientific study of matter and energy, their relation to atomic and molecular structure, and the physical and chemical changes they undergo. Students will review topics covered in Chemistry I and explore them in detail. Advanced topics include atomic and molecular structure, chemical bonding, organic chemistry, chemical equilibrium, acid-base theory, chemical thermodynamics, chemical kinetics, and principles of qualitative and quantitative analysis.

Physics/Lab 1.5 Credits

21

1.2 Weight Grades 10-12

Prerequisites: Students who have completed Biology and Chemistry with a 75% or better *Course Description:*

This course is recommended for students who are considering studying STEM at the next level. As a laboratory science with a mathematical focus, the course will allow students to investigate how we can build and analyze models that approximate how matter and energy change over time. Course topics begin with an overview of classical mechanics, including Newton's Laws, momentum, and energy, and progress toward advanced subjects like gravity, electromagnetism, waves, and modern physics.

Forensic Science 1 Credit
Grades 10-12

Prerequisites: Passing of Biology I with 75% or higher *Course Description:*

This course is designed to emphasize the application of biology and chemistry in a practical manner from the criminal justice world. The subject material will be covered in an intense approach. The topics that will be studied include fingerprints; DNA analysis; fiber and hair analysis; ballistics; document and handwriting analysis; drugs and toxicology; analysis of human (including skeletal) remains; and evidence from blood and other bodily fluids. This course is designated for students to demonstrate an understanding of scientific analyses used on different types of evidence through various laboratory experiments, comparison techniques, deductive reasoning and a detailed dissection of a fetal pig. Additionally, the course will include case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes.

Environmental Science

1 Credit Grades 11-12

Prerequisites: Passing of Biology I

Course Description:

Environmental Science is a two-semester course. Students will begin the course by looking at local and global environmental perspectives and end with working towards a sustainable future. Students will engage in the scientific processes while exploring real world applications of the environment and its past, present and future uses. Students will also engage in reading, writing, exploration, projects, and labs to increase their decision-making and problem-solving skills as well as increase their knowledge of environmental issues. This course will examine various scientific and civic topics in the context of past, best, and alternative practices from a global human perspective. Topics include Ecology, Flow of Energy, Natural Resources, Organism Interactions, Population Theory, Population dynamics, demography, Conservation and Preservation, Common Ground Law, Property Rights, agriculture.

Social Studies Courses

American History 1 Credit Grade 9

Prerequisites - None *Course Description:*

This course explores the origins of the first inhabitants in North America and how they arrived in this country. The three great civilizations of the Mayas, Aztecs, and the Incas are highlighted. Events in Europe will be studied, the Christian Crusades, the Renaissance, and the Protestant Reformation and how each led to the Age of Exploration. The course teaches the history of the United States from the beginning to the present. It will teach the economic system, the political science system, and diverse cultures of the United States. Social studies skills will be developed using graphs, charts, timelines, tables, pictures, and other graphics.

African American History

1 Credit Grade 10

PreRequisites - None *Course Description:*

This course covers the breadth of African American history and begins by looking at the early African Kingdoms of Ghana, Mali and Songhai. Students will then be looking at slavery and the effects that it had on the people involved as well as the country. The Civil war will be discussed in length as well as the Reconstruction after the end of the Civil War. This course will take students all the way to present day and the African American Identity in the 21st century. Students will participate in a community project entitled "Civil Rights Living Museum" and are required to create and present an artistic curation at a local community organization.

World History 1 Credit Grade 11

PreRequisites - None *Course Description:*

The purpose of the World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies from prehistory through today. This understanding is advanced through a combination of factual knowledge and appropriate analytical skills. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies.

Government 1 Credit Grade 12

Prerequisites - None *Course Description:*

Government is a required course for graduation and covers several aspects of government. Government will explore the origins of the American democratic system while looking at how the constitution embodies the values and purposes set up by the founding fathers. The structure and function of the government will be analyzed on a national, state, and local level while showing how each level is interrelated. This will launch the class into discussing how constitutional values relate to other nations and world affairs. Throughout the course, we will focus on how the people play an active role in government and the importance each citizen contributes to society.

Prerequisites - None Course Description:

This course is designed to provide high school students, from grades 10 to 12, with a comprehensive understanding of the fascinating field of psychology. This course offers an exploration into the inner workings of the human mind, behavior, and the factors that shape our thoughts and actions. Throughout the course, students will delve into various branches of psychology, including developmental, cognitive, social, personality, abnormal, and biological psychology. The course will also explore the historical development of psychological theories and the major figures who have shaped the field. Students will learn how psychology has evolved over time, from early philosophical ideas to modern empirical research methods. This course will lay the groundwork for further exploration of psychology in higher education and provide a valuable foundation for students interested in pursuing careers in psychology, counseling, social work, or related fields.

Note: This course may contain discussions of sensitive topics related to mental health and psychological disorders; however, these discussions will be conducted in a respectful and inclusive manner with appropriate support systems in place.

Speech and Debate

.5 Credit Grades 10-12

Prerequisites - None *Course Description:*

Students will be able to learn how to apply visuals, stories, organization, and nonverbal communication to speeches. Students will learn how to defend their position by learning tactics to help participate in debates. Students will look at previous speeches given by famous people and see how effective those speeches were.

Current Events .5 Credit
Grades 10-12

Prerequisites - None

Course Description:

Students will focus on world and local issues that affect students everyday lives, Students will focus on government, economics, and conflict going on around us. Students will read newspapers, online media, cartoons, and watch the news to support discussion in the class.

Foreign Language Courses

Spanish I 1 Credit Grades 9-12

Prerequisites: None *Course Description:*

This course will provide the student with a general introduction to the Spanish language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information, and basic grammatical structures. Emphasis will be on the acquisition of four skills: listening, speaking, reading, and writing. There two main objectives to the course – foremost is to give the students the ability to carry on a simple conversation; the second is to provide students with instruction that teaches a basic understanding of Spanish and Latin American culture, vocabulary, and grammatical concepts.

Spanish II 1 Credit Grades 10-12

Prerequisites: 80% passing grade in Spanish I, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

This course builds upon knowledge gained in Spanish I. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading, and writing. Emphasis is on the perfecting pronunciation, mastery of basic grammatical structures, and increased communicative proficiency. Acquisition of functional vocabulary is expected. Students will be exposed to more advanced verb tenses such as the past tense, future, and conditional tenses. Students will be expected to apply them in their writing and speaking.

Spanish III 1 Credit
1.1 Weight Grades 11-12

Prerequisites: 80% passing grade in Spanish II, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

This weighted course builds upon knowledge gained in Spanish 1 and 2. The course is a continuation and recycling of knowledge acquired in Spanish 1 and 2, as well as an introduction to new vocabulary, grammatical structures, and expressions. Students will be expected to expand their vocabulary range to include more advanced and technical terms, use advanced language expressions, verb tenses, and grammatical concepts such as the imperfect and subjunctive mood. Students will view Spanish language films and read selected Spanish language literature.

Spanish IV 1 Credit 1.2 Weight Grade 12

Prerequisites: 80% passing grade in Spanish III, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

This weighted course builds upon knowledge gained in previous Spanish levels. The course is a continuation and recycling of knowledge acquired previously, as well as an introduction to new vocabulary, grammatical structures, and expressions. The primary goal is to prepare students to be college-ready, well-rounded global citizens who can communicate effectively in Spanish and

are aware of the cultural differences and influences of the Spanish and Latino heritage at home and abroad.

This course consists of a communicative approach with emphasis on grammar, vocabulary, and Spanish and Latin American literature and culture to strengthen the student's proficiency in Spanish. Students will have an opportunity to reinforce reading, speaking, listening, and writing skills through individual and group activities. Students are expected to keep up with the pace of content and reading assignments.

French I 1 Credit
Grades 9-12

Prerequisites: None *Course Description:*

French I is the first of four levels of French. The course is designed to meet the ACTFL World-Readiness Standards for Learning Languages. Goal areas include: Communication, Cultures, Connections, Comparisons and Communities. This foundation course is divided into four different strands of outcomes, Speaking and Listening, Reading and Viewing, Writing and Representing, and Culture. In this communicative based course, students develop competencies through engagement with a variety of authentic resources from all over the Francophone world, as well as the *Bien Dit* textbook series and various online resources. In and out of class experiences are developed to encourage students to think critically about culture and their place in the world. The cross-curricular nature of the course exposes students to history, gastronomy, athletics, music, current events, art and architecture, holidays and much more from a unique, international perspective.

French II 1 Credit
Grades 10-12

Prerequisites: 80% passing grade in French I, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

French II is the second of four levels of French. The course is designed to meet the ACTFL World-Readiness Standards for Learning Languages. Goal areas include: Communication, Cultures, Connections, Comparisons and Communities. This intermediary course is divided into four different strands of outcomes, Speaking and Listening, Reading and Viewing, Writing and Representing, and Culture. Building on the foundation of level I, students will deepen their knowledge of grammatical structures and vocabulary. In this communicative based course, students develop competencies through engagement with a variety of authentic resources from all over the Francophone world, as well as the *Bien Dit* textbook series and various online resources. Students will learn to measure their own proficiency and develop language goals based on "Can-do" statements, a nationally developed scale to measure and assess language growth.

French III 1 Credit
1.1 Weight Grades 11-12

Prerequisites: 80% passing grade in French II, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

French III is the third of four levels of French. The course is designed to meet the ACTFL World-Readiness Standards for Learning Languages. Goal areas include: Communication, Cultures, Connections, Comparisons and Communities. This intermediary course is divided into four different strands of outcomes, Speaking and Listening, Reading and Viewing, Writing and Representing, and Culture. Building on the foundation of levels I and II, students will deepen their knowledge of complex grammatical structures and vocabulary. In this communicative based course, students develop competencies through engagement with a variety of authentic resources from all over the Francophone world, as well as the *Bien Dit* textbook series and various online resources. Students will measure their own proficiency and develop language goals based on "Can-do" statements, a nationally developed scale to measure and assess language growth. Students are challenged to not only think critically but also to articulate, debate and question themes of bias, tolerance, environment, education, political structures, gender roles, philanthropy, international manners, customs and beliefs, etc.

French IV 1 Credit 1.2 Weight Grade 12

Prerequisites: 80% passing grade in French III, others permitted with teacher recommendation and upon completion of placement test.

Course Description:

French IV is the fourth and final level of French. The course is designed to meet the ACTFL World-Readiness Standards for Learning Languages. Goal areas include: Communication, Cultures, Connections, Comparisons and Communities. This advanced course is divided into four different strands of outcomes, Speaking and Listening, Reading and Viewing, Writing and Representing, and Culture. Building on the foundation of levels I - III, students will deepen their knowledge of complex grammatical structures, vocabulary and literature. In this communicative based course, students develop competencies through engagement with a variety of authentic resources from all over the Francophone world, as well as the *Bien Dit* textbook series and various online resources. Students will measure their own proficiency and develop language goals based on "Can-do" statements, a nationally developed scale to measure and assess language growth. Students are challenged to not only think critically but also to articulate, debate and question themes of bias, tolerance, environment, education, political structures, gender roles, philanthropy, international manners, customs and beliefs, etc. Students will develop various opportunities to use, demonstrate and teach language in and outside of class. Additionally, students will explore options of advancing their language study in post-secondary platforms.

College and Career Education Requirements

Intervention Grades 7-12

Prerequisite: None *Course Description:*

This quarter credit class is a course that students will take opposite lunch times in order to get "What I Need" (WIN) in either Math or Reading. Students will be broken into groups based on their academic level and area of need on the PSSA and Keystone Exam. Students who have passed those exams will enter an Enrichment time where they will further their understanding of their core content areas. Students will be given grades for completion of their work on two separate platforms. In Math they will use Edmentum and in Reading they will work on reading fluency passages. The students working through Edmentum will increase their scores by working on their individualized Pathways set up through the computer program, meeting the students where they are academically.

Keystone Prep .5 Credit Grade 9

Prerequisite: None *Course Description:*

This course is a data driven review of Keystone Exam Assessment Anchors and Eligible Content. The course will use data from the Keystone Exam to identify areas of strength and weakness for individuals as well as the class and then provide specific content area practice in order to further develop Algebra, Biology, and Literature skills.

Career Education .5 Credit
Grades 8 and 11

Prerequisite: None *Course Description:*

There is a heavy focus on becoming college ready, career planning (complete career inventory test is completed by every student), preparing for work, success skills, money management with a focus on economics and business math, being a good and responsible citizen and what being a lifelong learner means. This course also requires 4 oral presentations in which students speak in front of the entire class on topics ranging from career choices to colleges and the military.

Personal Finance .5 Credit
Grade 12

Prerequisite: None *Course Description:*

This course heavily reinforces the Career class however, the focus is on an economically smart way of thinking, earning income, managing income and revenue as well as saving money, investing money, credit and investments. Beginning with financial planning, students will learn valuable principles on how to budget, helpful tools to use when planning, and problem-solving strategies to make informed decisions. With that foundation, they'll move on to learning about the relationship between careers and income. They'll learn to calculate net worth and net income, explore various occupations and the income for each, and how income taxes work. This course also takes students through a 9-month long checking account simulation where students will write out checks, fill out deposit slips and keep track of online banking and activities.

Fine Arts Courses and Electives

Art I 1 Credit Grades 9-12

Prerequisite: None *Course Description:*

This course is a full year elective for students'. Students who have an interest in drawing and painting would be the most likely to elect this class. The course will introduce them to the elements of Art, as well as various artists and artistic styles (past and present). Some periods of Art will be covered as well. A working portfolio will be kept in the art room to monitor progress and daily participation is required to keep up. In the spring, the art classes display their "showcase" work in conjunction with either the school play or the spring concert.

Art II 1 Credit
Grades 10-12

Prerequisite: Successful completion of Art 1

Course Description:

This course is a full year elective for students' who completed Art 1 with a C(70%) or higher. Students must have established a foundation to build upon the elements of Art. There must be some drawing ability in the student for them to continue in the Art program. Some transfer of knowledge from the prior year is a necessity. Drawing is a large part of this course, so it only follows that if a student has little or no interest in drawing, the student should not elect to take Art II for a full year. Each student in the art room will keep a working portfolio and there will be individual as well as classroom critiques to monitor progress. Daily participation is necessary. Some work will be 3-dimensional so attendance is important as it becomes difficult to keep current with the assignments. A spring art show will display the students' work.

Art Projects 1 Credit
Grades 10-12

Prerequisite: Successful completion of Art 1

Course Description:

This course is a full year elective meant to be a "hands-on art class" for students who aren't necessarily gifted in the drawing area of Art. The use of tools (such as X-acto knives, hot glue guns, staplers, etc.) is common and the instructor must monitor the use of such tools. Students will make various craft projects as well as painting and some fabric artworks. Projects will often be on display throughout the year. An art show in the spring will highlight their work.

General Music 0.5 Credit
Grades 9-12

Prerequisite: None *Course Description:*

This is a non - performing music class and is designed to be a music appreciation course. Students will learn basic musical concepts, from how to read music to the history of musical geniuses and genres. Students will explore music and what all goes into creating music. They will learn to play different instruments, create sound on percussion instruments, and also how their voice can function as a crucial instrument to the modern world. This is a course that is designed for students to gain a beginning love for music, expecting progress and not perfection.

Music Technology

0.5 Credit Grades 9-12

Prerequisite: None *Course Description:*

This course will focus on the composition of music using the district provided Chromebook. Students will be taught and assessed in written music theory. Language, poetry, and prose will be studied. Hip hop and pop history will be studied. Written music theory will be applied to the electronic music making process. Areas of composition will include beat making, recording vocals, use of midi, melody, harmony, bass, and percussion composition. Music terminology and technical vocabulary will be taught and reinforced. Copyright laws will be studied relating to the use of samples in music. The above concepts will allow students to compose and create their own original material.

Chorus 1 Credit Grades 7-12

Prerequisite: None *Course Description:*

This course consists of students in grades 7th - 12th. While participating in choir, students have the opportunity to study and perform many different musical genres including, but not limited to, Popular, Disney, Musical Theater, Gospel, and some Classics. Singing in a choir develops musical skills and also interpersonal relationship skills, we work as a team to produce a greater product. In order to be a member of the choir program, students must connect with the teacher. Students are graded on class attendance, participation, mandatory performance, and other enrichment activities. The performances include and are not limited to the Winter Concert, Our

Mercer County Courthouse performance, and our Spring Concert. The consequence for any missed performance is a zero percent grade unless an excused absence has been communicated with the teacher. 7th and 8th grade students do not receive high school credit for this course.

Drumming - World, Cardio, and Bucket

0.5 Credit Grades 9-12

Course Description:

While participating in the drumming elective students will have the opportunity to create music and ensembles using multiple different types of percussion, including but not limited to, cardio drums, bucket drums and world music drumming. Drumming is a language in itself, communicating with fellow peers using the drums only. This course will offer the opportunity for students to have lessons in cooperative teamwork. Drumming offers the opportunity to create an ensemble without using any words or pitched instruments.

Beginner to advanced drummers are welcome!

Band 1 Credit Grades 7-12

Prerequisites: The student must be a member in good standing in the Cadet Band, and/ or pass an audition approved by the Director of Bands.

Course Description:

Band gives the student the opportunity to continue to develop musical skills: technique, intonation, dynamics, articulation, tone quality, self-discipline, responsibility, and musicianship. High School Band consists of Concert Band. Students are required to participate in all of the ensembles. Students are required to attend all performances. Wide varieties of musical styles will be studied including: classical, contemporary band literature, jazz, and marches. 7th and 8th grade students do not receive high school credit for this course.

Marching Band and Pep Band will take place after school, as it is an extracurricular event. Students who wish to participate will have to go through an audition. Practices after school and throughout the summer will be mandatory in order for participation in this event.

Health and Physical Education

General Physical Education

.5 Credit Grades 7-12

Prerequisite: None *Course Description:*

The curriculum will focus on lifetime fitness through aerobic workouts, strength training and participation in a variety of team and individual sports. Classes will utilize the fitness center and weight room for personal fitness while skills, rules and strategies for various team sports will be taught in the gymnasium and outside on the field. In addition to participation in physical activity, quizzes and tests will be used to assess related knowledge. Students will also learn responsible personal and social behavior that shows respect for self and others in physical activity settings. Students will gain an appreciation for and value physical activity not only for the healthful benefits, but also for the self-expression, the social interaction, the enjoyment and the challenge.

Health .5 Credit
Grade 10

Prerequisite: None *Course Description:*

This course enables students to acquire the knowledge and skills necessary to promote the lifelong goals of health and wellness. The focus of the course is to empower each student with the capacity to obtain, interpret and understand basic health information and services, and apply that knowledge to make informed health enhancing decisions in their daily life. Content areas included within the study of Health Education would include the following: community health, consumer health, environmental health, family life (human sexuality, parenting, relationships, human growth and development), mental and emotional health, injury prevention, nutrition, personal health and fitness, prevention and control of disease, and substance use and abuse. Through the study of these conceptual areas, students will not only comprehend the principles related to health promotion and disease prevention, but will also be able to demonstrate their ability to use this knowledge in a healthful manner.

Physical Education Electives

Physical Fitness and Wellness

.5 Credit Grades 10-12

Prerequisite: Completion of General Physical Education

Course Description:

This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. The course will focus on the components of fitness through lessons that will introduce proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Upon completion of this course, students will understand and appreciate the lifelong benefits derived from personal fitness training.

Grades 11-12

Prerequisite: Grade of 80% or higher in Physical Fitness and Wellness *Course Description:*

The students in this course will participate in advanced strength training exercises designed to improve muscle strength and overall fitness. This course will consist of: weight lifting, agility training, and anaerobic activities. Students will develop individual fitness profiles and plans. They will also identify and understand muscle groups in relation to various exercises.

Advanced PE .5 Credit
Grades 11-12

Prerequisite: Grade of 80% or higher in Physical Fitness and Wellness *Course Description:*

This advanced course in physical education is designed for students who are interested in physical activity and lifetime values of exercise and sports. Students have the opportunity to improve some of the skills they have learned in previous physical education classes. The course includes non-traditional activities to go along with some of the more conventional sports and games. Field trips will be offered as well.

Advanced Swimming

.5 Credit Grades 11-12

Prerequisite: Grade of 80% or higher in Physical Fitness and Wellness *Course Description:*

Advanced Swimming will focus on a personalized swimming fitness program designed to improve swimming technique and endurance. This course is designed for students who enjoy being in the pool regularly. Student Learning Outcomes include: Perform and practice at least four major swimming strokes. Develop a personalized swimming fitness plan. Demonstrate improved endurance in swimming laps.

Family and Consumer Science Electives

Family and Consumer Science I

1 Credit Grades 9 -12

Prerequisites: None *Course Description:*

This course will prepare students for family life, work life, and careers by providing hands on opportunities to develop the knowledge, skills, attitudes, and behaviors needed for strengthening the well-being of individuals and families, promoting nutrition and wellness, managing resources to meet the material needs of individuals and families, using critical and creative thinking skills to address problems in all environments, and functioning effectively as providers and consumers of goods and services. Course work includes sanitation and safety, food labs, textile projects, individual nutrition and activity tracking, childcare skills, kitchen tools and equipment usage, and kitchen math.

Family and Consumer Science II

1 Credit Grades 10-12

Prerequisites: Successful completion of FCS I

Course Description:

This course is intended to expand upon previous food and nutrition skills to choose, purchase, prepare, and eat healthful food at home, work, or in the community. The student will be introduced to various culinary international ways of combining fresh foods, convenience foods, prepared foods, and eating out into a healthful eating plan.

Family and Consumer Science III: International Food

1 Credit Grades 10-12

Prerequisites: Successful completion of FCS I and FCS II

Course Description:

This course is intended to expand upon previous food and nutrition skills to choose, purchase, prepare, and eat healthful food at home, work, or in the community. The student will be introduced to various culinary international ways of combining fresh foods, convenience foods, prepared foods, and eating out into a healthful eating plan.

FCS Fashion and Design

.5 Credit Grades 10-12

Prerequisites: Successful completion of FCS I

Course Description:

This course expands upon knowledge acquired in FCS I in textiles. The student will use advanced construction techniques on sewing machines, heat presses, embroidery machines, irons, cutting boards, mannequins, and Adobe Design programs to complete textile projects. This course investigates career paths within textile and apparel design industries.

FCS Child Development

.5 Credit Grades 10-12

Prerequisites: Successful completion of FCS I

Course Description:

This course is intended to expand upon previous learned skills, ideas, and concepts in FCS I that students can use throughout their lives. Child development is the process of physical, cognitive, emotional, and social growth that occurs from birth to adulthood. It involves a child learning and

mastering skills, called developmental milestones, during predictable time periods through "Baby Think It Over" and elementary observations. Topics also include personal development, food preparation and nutrition, and textiles.

Technology Education

Media Productions

1 Credit
Grades 9-12

Prerequisite: NONE Course Description:

Students will be introduced to digital video equipment and concepts used in Hollywood filmmakers. Students will navigate from pre-production to post-production processes by working both individually and in groups. Student projects will include: documentaries, commercials, news packages, and short films. These projects will be completed utilizing digital video cameras, non-linearing editing applications and digital storytelling techniques.

HS S.T.E.A.M. 1 Credit
Grades 9-12

Prerequisite: NONE Course Description:

Students will learn to utilize 21st century skills in collaboration, critical thinking and communication. Students will innovate and design projects and create solutions to real-world scenarios, evaluate outcomes via iterative processes, and create individualized designs through the use of digitally controlled prototyping equipment which includes 3D Printing, Laser Cutting & Engraving and digital media designs. Students will focus on the interdisciplinary nature of 21st-century engineering projects by incorporating multiple threads of learning connected to science, technology, engineering, art and mathematics.

Manufacturing and Design

1 Credit Grades 10-12

Prerequisite: Completion of HS S.T.E.A.M with 70% or higher **Course Description:**

Students will analyze technical systems, the historical evolution of various manufacturing systems and examine various inputs required for manufacturing techniques in the 21st-century. Students will participate in various aspects of research, development and problem-solving to identify their own goals to successfully produce individualized products in a manufacturing technology lab. Students will gain skills in manufacturing technologies such as: Computer Numerical Controlled machines (CNC), Computer Integrated Manufacturing, and Additive/Subtractive Materials Manufacturing via 3-D Printing and Laser Cutting/Engraving. An emphasis will be placed on the development and design of products by utilizing each individual student's creativity and problem solving skills.

Robotics 1 Credit Grades 10-12

Prerequisite: Completion of HS S.T.E.A.M with 70% or higher

Course Description:

Students will learn the basics of robotics and programming by utilizing a STEAM mindset in a collaborative environment. Student objectives for this course are to introduce them to programming mobile robots, design models and systems related to the engineering process, and apply new knowledge of mechanical and electrical systems to build a robot via the VEX robotic systems. Students will work collaboratively in a competitive environment to develop problem-solving skills, teamwork and an innovator's mindset.

Introduction to Computer Programming

1 Credit Grades 9-12

Prerequisite: None *Course Description:*

Computer Science and computational problem solving are fundamental skills for engaging the 21st-century marketplace of ideas and economies. This course is a hands-on introduction to computer programming and consists of learning how to design, write, test, debug, and maintain computer software. This course will use the browser-based integrated Interactive Development Environment from Carnegie Mellon University's CS Academy and its associated graphics package. The course is taught using the programming language Python which is easy to read and understand and is popular in college and industry.

Computer Science Principles (AP Tested)
1.2 Weight

1 Credit Grades 10-12

Prerequisite: B or better in Algebra 1 and English class

Course Descriptions:

CSP introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. The course will be taught through Code.org's curriculum which is a rigorous, entry-level course that introduces high school students to the foundations of modern computing. Code.org is recognized by the College Board as an endorsed provider of curriculum aligned to the AP CSP assessment if the student chooses to take the exam. The course covers a broad range of foundational topics such as programming, algorithms, the internet, big data, digital privacy and security, and the societal impacts of computing. The goal of this course is to provide students with a "future proof" foundation in computing principles so that they are adequately prepared with both the knowledge and skills to live and meaningfully participate in our increasingly digital society, economy, and culture.

SPECIAL PROGRAMS

E-Academy

Entrepreneurship Academy @ Lindenpointe

3 FASD Elective Credits Grade 12

12:30pm – 2:45pm Monday – Thursday at Lindenpointe Facility, Hermitage, Pa.

S.T.E.AM. Entrepreneurship Academy will develop 21st Century skills through a project based entrepreneurial experience for high school seniors. This will be accomplished by blending core academic standards with customized learning opportunities in the fields of Science, Technology, Engineering, Arts, and Mathematics (STEAM) through collaborations with K-12 educators, higher education and business partners.

Since there are a number of courses listed, it may be difficult for you to select a sequence to follow from grade 9 through grade 12. Teachers and guidance counselors understand this problem, they have suggested sequences for you to choose depending on your interests, abilities, and career plans. (See pages 12, 13). No matter which direction you decide to go after graduation – college, technical school, military service, business school, job or homemaker – there are courses offered that can help you to be well prepared. However, understand that your participation, attendance, effort and attitude play a significant role in your success in those chosen career paths.

Keeping these thoughts in mind, relying upon experience with the past, and projecting into the future, the following recommendations are made to you. Grade 12 Only (An application process is required and students must have a 3.0 or higher to qualify.) There are a limited number of seats for this course, so students will be chosen on a first come basis.

S.T.E.A.M. Entrepreneurship Academy will develop 21st Century skills through a project-based entrepreneurial experience for high school seniors. This will be accomplished by blending core academic standards and customized learning opportunities in the fields of Science, Technology, Engineering, Arts and Mathematics (STEAM) through collaborations with K12 educators, higher education and business partners.

MERCER COUNTY CAREER CENTER:

3 FASD Elective Credits (per year for 6 total)

Grades 11 & 12

FARRELL AREA SCHOOL DISTRICT GUIDELINES FOR ATTENDING

All students are encouraged to investigate the training and opportunities available at the Mercer County Career Center. Students who are planning to pursue a career that does not require a college degree are encouraged to complete an application to the Career Center. Any student from Farrell may attend the Career Center upon successfully meeting the standards necessary for application.

Students who do not meet the standards initially may apply as soon as the standards are met. Special needs students will be considered based on his/her I.E.P. It is the goal of the district to assist every student to meet the standards necessary to graduate and pursue training that is best suited to the interests and abilities of the student.

Mercer County Career Center

Mercer County Career Center offers programming in technical and mechanical, professional, service, and production occupations to eligible high school students residing in Mercer County. Students who complete 9th, 10th, or 11th grade may apply for admission to any MCCC program by submitting the MCCC Application for Admission. Please visit www.mercerccc.org, speak with your school Guidance Office, or call 724-662-3000 ext. 1070 to speak with our Marketing & Public Outreach Coordinator for complete admission details. The desire to learn, a cooperative work attitude, and an ambition to engage in high-skill technical instruction are qualities needed to be a successful student in any of the programs. The technical course work includes cutting edge technologies with rigorous and relevant curriculum. This curriculum will prepare students, of all ability levels, to enter an occupation, a post-secondary school, or the military. Each student's pathway to success is unique. MCCC can help you explore that pathway. Students considering enrollment at MCCC need to consider a number of personal factors including; career interests, academic abilities, social maturity, and specific career aptitudes.

Earning College Credit at MCCC: Students can earn advanced placement at various post-secondary institutions by taking advantage of local articulation agreements established by MCCC or by accessing statewide articulation credits for eligible students.

Local Articulation Agreements: Agreements have been established with college and career schools throughout the region. Qualifying students have the opportunity to receive credits at specific institutions for learning achievements accomplished at MCCC. The number of credits awarded and specific requirements vary for each institution. Call the MCCC Guidance Office for the latest articulation information at 724-662-3000.

Statewide Articulation Agreements: MCCC strives to prepare students for college and careers in a diverse, high-performing workforce. MCCC courses that are considered a program of study (POS) course are eligible for statewide articulation agreements. These statewide articulation agreements are a partnership between secondary schools and post-secondary institutions throughout Pennsylvania. To view

current statewide articulation agreements, go to the equivalency search results for PA Bureau of Career and Technical Education at the website www.collegetransfer.net.

MCCC Programs of Study Eligible for Statewide Articulation: Computer Information Technology, Culinary Arts, Early Childhood Education, Carpentry, Automotive Technology, Diesel Technology, Collision Repair and Refinishing, Welding, Health Care Careers, Logistics & Supply Chain Management, and Electrical Occupations.

Industry Certifications: Numerous certification opportunities exist for MCCC students. A certification is a business and/or industry documentation verifying skills and knowledge in a specific area of study. These certifications may become increasingly important for advancement within a career area.

<u>Cooperative Education</u>: Qualifying second and third-year students may wish to consider participating in the Cooperative Education program. The program provides students the opportunity to be employed in his/her area of vocational-technical study, while earning wages. This program is supervised by the MCCC Cooperative Education Coordinator. All MCCC courses are eligible for participation, but students need to meet specific requirements, apply, and be accepted into the program. Cooperative Education guidelines established by the PA Department of Education and approved by the local area school districts will be followed.

The Diversified Occupations program is a one-year program offered to seniors only. The course is designed to combine classroom instruction with on-the-job training in a career area of the student's choice. This program integrates classroom studies in employability skills and consumer skills with planned, supervised, and practical work experience in a business setting. Students will develop personal initiative, learn to work with others and recognize the importance of an appropriate attitude and behavior for the occupation. This program is an option for seniors, who wish to study in a specific training area that is not represented at MCCC, or if the program is overenrolled.

MCCC staff will work cooperatively with the Senior High school counselors to meet the needs of every student. Questions about specific programs of study at MCCC can be referred to the MCCC Marketing Coordinator at MCCC (724) 662-3000 ext. 1070

Automotive Technology

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Automotive Technology allows students to perform a wide range of diagnostics, repairs, and preventative maintenance on automobiles and light

trucks. Students will gain the technical knowledge and skills to obtain an entry-level position and/or pursue postsecondary education. The program's curriculum enables students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The

program's instruction includes the diagnosis and testing of malfunctions in and repair of engines, fuel, electrical, cooling, steering, suspension and brake systems. Students also prepare to obtain certifications for PA Safety Inspection; Emissions Inspection; and Refrigerant, Recovery, and Recycling. Students also study technical mathematics, residential steel-framing, and cabinetmaking.

Industry Certifications

• Automotive Service Excellence (ASE):

Brakes, Engine Performance, Engine

Repair, Steering/Suspension

- Valvoline Motor Oil Certification
- Safety and Pollution Prevention (S/P2)

Carpentry

Grades: 10, 11, or 12 Length: 36 weeks Credits: 3.0

Carpentry prepares students to obtain entry-level positions in the construction or wood industries, apprenticeships in trade unions, and/or to pursue

enrolling in postsecondary institutions for degrees in construction, sales, or management. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual/group projects, and activities. The program's instruction includes units on safety, hand and power tools, blueprint reading, framing, interior and exterior finish, construction materials, measuring, estimating, and building codes.

Industry Certifications

- OSHA-10 Hard Construction Training
- PA Builders Association Certification
- Ladder Safety Certification
- Fork Truck Certification

Collision Repair & Refinishing

Grades: 10, 11, or 12 Length: 36 weeks Credits: 3.0

Collision Repair and Refinishing prepares students to obtain an entry-level position in the collision repair/refinishing field and/or to pursue postsecondary education. The curriculum enables students to develop technical knowledge and skills through real world, hands-on shop experiences. The program will cover the entire repair and refinishing process from start to finish. The

instruction will focus on key areas including workplace skills, safety techniques, vehicle design and construction, structural and non-structural repairs, industry related welding and fabrication, estimating, collision repair procedures, automotive painting, refinishing and detailing. Students will learn all these skills in a state-of-the-art shop with industry standard equipment. Students will be expected to read and understand complex instructions as well as using technology as an industry resource.

Industry Certifications

- PPG Blue Level Refinishing Technician
 iCAR (Multiple Certifications)
- Safety & Pollution Prevention (S/P2)

Computer Information Technology

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Computer Information Technology prepares students to obtain entry-level employment and provides a foundation for post-secondary success. The curriculum enables students to develop a core set of technical skills by applying learned knowledge in hands-on lab experiences. The program will provide students

experience in the administration and support of computer networks. These include user and group management, server security, network sharing, operating systems, user and workstation security, help desk support, computer repair, and remote access. Students will focus their study on network technologies, network devices, network management, tools, and security. Computer Information Technology students will be expected to read and interpret complex instructions, technical literature, and solve a variety of technical problems.

Industry Certifications

- TestOut PC Pro*
- TestOut Network Pro*
- TestOut Cyber Defense Pro*
- * Preparation for CompTIA A+ and Network+

The Computer Programming course focuses on the general writing and implementation of generic and customized programs that drive operating systems. This prepares students to apply the methods and procedures of software design and programming to software installation and maintenance. Computer Programming includes instruction in software design, low- and high-level languages and program writing, program customization and linking, prototype testing, troubleshooting, and related aspects of operating systems and networks. Students will study data types and expressions, designing functions, and graphic and image processing. As well as learn software development process.

Industry Certifications

- W3 Schools Python Programmer
- W3 Schools HTML Programmer

Computer Programming

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Cyber Security Academy

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

The Cyber Security Academy is a specialized program designed for students who wish to pursue a career as security analysts, ethical hackers and cyber security technicians. Students will complete two years of foundational learning in computer information technology and computer programming. Building on the foundational

curriculum, students will be prepared to take the next step into the world of cyber security. Year three students in the academy will experience advanced training in protecting and defending digital systems. Students will explore crucial topics such as threat analysis, vulnerability assessment, cryptography, and incident response, with a strong focus on real-world applications. They'll learn to safeguard networks against cyber-attacks, detect and neutralize threats, and implement security protocols to protect data and systems.

Industry Certifications

• CyberDefense Pro Certification

Cosmetology

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Cosmetology prepares students to become licensed cosmetologists in specialized and full-service salons. Students develop a knowledge base through classroom theory lessons while perfecting their clinical skills in the program's student operated salon. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual and group projects, along with other activities. The programs instruction includes units on shampooing, conditioning, cutting and styling hair, chemical texture services, and hair coloring techniques. As well as hands on training offering facials, manicures, and pedicures. Personal safety, professionalism, and the sanitation and disinfection of equipment and facilities are emphasized. Students also study business management with a focus on managing a salon.

Industry Certifications

PA State Board of Cosmetology License
 Safety & Pollution Prevention Cosmetology

Culinary Arts

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Culinary Arts prepares students to obtain entry-level employment within institutional, commercial, and independently owned food establishments. This program also provides a foundation for students who wish to pursue acceptance into a postsecondary culinary program. The program's curriculum enables students to develop knowledge through classroom theory lessons and acquire

culinary skills by applying learned knowledge in the program's fully equipped commercial kitchen and dining room. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual/group projects and activities. The program's instruction includes units on use and care of utensils, food preparation equipment, safety, sanitation procedures, nutrition basics, and recipe preparation. Students develop and practice skills through hands-on activities and experiences related to planning, selecting, preparing, and serving quality food and food products.

Industry Certifications

- ServSafe
- ProStart

 Safety and Pollution Prevention Culinary education. The curriculum enables the students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety, diesel engine mechanics, suspension and steering, air/hydraulic brake systems, electrical and electronic systems, and preventive maintenance. Students develop skills for troubleshooting problems, disassembling, rebuilding and reassembling engines. Students apply principles to service electrical and electronic systems. There is also an emphasis on inspecting, repairing/replacing various systems' components, as well as performing preventive maintenance on medium/heavy vehicle systems.

Industry Certifications

- Automotive Service Excellence
- OSHA-10
- Safety and Pollution Prevention Heavy Duty S/P2
- Multimeter NC3 Certification
- Certified Safety Inspector I

Diesel Technology

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Diesel Technology prepares students to obtain entrylevel employment and/or to pursue postsecondary

Electrical Occupations

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Electrical Occupations prepares students to apply technical knowledge and skills necessary to install, operate, maintain and repair many electrical systems. These include: electrically energized residential, commercial and industrial systems, AC motors, as well as controls and electrical distribution panels. Instruction emphasizes practical application of circuit diagrams and the use of electrical codes. In addition, the curriculum also includes blueprint reading, sketching and other subjects essential for employment in the electrical

occupations. Other critical components of the program are reading and interpretation of commercial/residential construction wiring codes and specifications, installation and maintenance of wiring, conduit hand and machine bending techniques along with service and distribution networks within large construction complexes.

Industry Certifications

- Fork Lift Certification
- Ladder Certifications
- OSHA 10
- Snap on Multimeter

provides students with health career exploration activities, instruction of basic skills, and job shadow experiences. These activities are fundamental to all areas of health care. Students develop health care knowledge through classroom theory lessons while practicing health care skills in a laboratory setting. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual/group projects. The program's core instruction includes units on medical terminology, anatomy and physiology, basic clinical skills, aseptic techniques, OSHA regulations, and infection control.

Health Care Careers

Grades: 10, 11, or 12 Length: 36 weeks Credits: 3.0

Health Care Careers prepares students to obtain entry-level positions in the health field and/or to pursue a postsecondary education. The program

Industry Certifications

- Certified Patient Care Technician
- American Heart Association Health Care
 Provider CPR with AED/First Aid/Pediatric
 First Aid
- OSHA-10 Health Care

Logistics - Material & Supply Chain Management

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Logistics and Materials Management is designed to prepare individuals for entry level employment in this industry. Students will learn and perform logistical functions associated with receiving, storing, and shipping goods along with forklift training. Other key components include learning various systems and record keeping for supply chain management.

Students with good attention to detail who enjoy a fast-paced, hands-on, physical workplace would be successful in this program. The curriculum provides instruction in the use of powered material, handling equipment, and OSHA safety and ergonomics. Supply chain management, automated inventory

control systems, purchasing, receiving, order selections, packaging, and shipping methods are presented. Academic subjects include business mathematics and communication. The course includes job retention skills and customer relations.

Industry Certifications

- OSHA Career Safe
- MSSC Certified Logistics Associate •

MSSC – Certified Logistics Technician •

Forklift Training

skill sets in service-related employment areas. This program will provide students with the opportunity to explore careers in the personal services cluster and gain the employability skills needed for job placement. The Service Occupations curriculum encompasses the areas of workplace safety, grounds maintenance, cleaning practices, housekeeping, custodial and retail stock. Students learn hands-on skills while also focusing on workplace readiness, interpersonal skills, the ability to collaboratively the independently and and development of good work habits. The students train in all areas of the curriculum with the intent of obtaining competitive entry-level employment. Students learn in an environment that fosters work ethic, competitive time on task and personal accountability

Industry Certifications

Service Occupations

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Service Occupations is an innovative program focusing on training students in a diverse array of

• Family & Consumer Sciences

Sports Medicine

Grades: 10, 11, or 12

Length: 36 weeks Credits: 3.0

The Sports Medicine program will prepare students to work in a variety of entry-level positions within the physical and occupational therapy occupations. Students will also have a solid educational base on which to build a post secondary degree. The Sports Medicine program will prepare students with a strong foundation in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, recognition, assessment, management, disposition, and rehabilitation of injuries. Students will learn the

principles of designing exercise programs for healthy individuals and those who are in a rehabilitation phase after an accident or injury.

Industry Certifications

- ASCM Certified Personal Trainer
- CPR/First Aid/AED
- Bloodborne Pathogens

Welding

Grades: 10, 11, or 12 Length: 36 weeks

Credits: 3.0

Welding prepares students to obtain entry-level employment as a welder or any welding-related position in both large and small companies. It also allows the student to pursue enrollment in a postsecondary program, such as welding engineering or metallurgy. The program's curriculum enables students to gain a knowledge base through classroom theory lessons. Program activities allow students to put their classroom learning into hands-on practice of technical skills. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety practices, gas cutting and welding, arc welding in



various positions, and types and uses of electrodes and welding rods. Students also learn to fabricate and join metal parts according to diagrams, blueprints, and specifications.

Industry Certifications

- American Welding Society AWS
- OSHA-10

For further information on Mercer County Career Center programs and services, please visit our web site www.mercerccc.or

1.1 Weight Grades 11-12

Prerequisite: NONE *Course Description:*

Candidates will gain the knowledge and skills required to identify and explain the basics of computing, IT infrastructure, software and and demonstrate their knowledge to install software, establish basic network connectivity and identify/prevent basic security risks. Further, this course will develop the candidates knowledge in the areas of troubleshooting theory and preventative maintenance of devices. This course is intended for candidates who are considering a career in IT or CyberSecurity and are interested in pursuing professional-level certifications, Course overall goal(s): Prepare students to take the CompTIA Network+ course.

CompTIA Network+
1.1 Weight

1 Credit Grades 11-2

Prerequisite: Introduction to Computer Concepts

Course Description:

CompTIA Network+ course helps students to develop skills necessary for careers in IT infrastructure. The technical skills covered include networking fundamentals, implementations, operations, security, and troubleshooting. The new certification program includes expanded coverage over concepts to help with collaboration efforts, best practices, new hardware, and virtualization techniques to keep network resilience. Jobs that utilize this certificate include junior network administrator, datacenter support technician, network engineer, system administrator, NOC technician, cable technician, and telecommunications technician. The CertMaster Integrated Learn and Labs takes approximately 42.2 hours, and the CertMaster Practices takes between 13-15 hours to complete. This course has a cost of \$332 per student in attendance.

CompTIA Security+ 1 Credit
1.1 Weight Grade 12

Prerequisite: Introduction to Computer Concepts and CompTIA Network+ *Course Description:*

CompTIA Security+ certificate is the first security IT certificate that new professionals should earn. This course introduces core knowledge and concepts required for cybersecurity roles such as laws, policies, security solutions, and how to monitor, identify, analyze, and respond to security events and incidents. Possible jobs upon completion include security / system administer, helpdesk manager / analyst, network / cloud engineer, security engineer / analyst, development operations (DevOps) / software developed, IT auditors, and IT project managers. Credits and hours required for completing this course are in the works. The CertMaster Integrated Learn and Labs takes approximately 48.9 hours, and the CertMaster Practices takes between 13-15 hours to complete. This course has a cost of \$409 per student in attendance.

CompTIA Cybersecurity Analyst (CySA+) 1.1 Weight

1 Credit Grade 12 **Prerequisite:** Introduction to Computer Concepts and CompTIA Network+ and Security+ *Course Description:*

CompTIA Cybersecurity Analyst (CySA+) course is an intermediate-level certification program that develops skills for cybersecurity analytics and the importance of risk mitigation for networks and devices through security monitoring. Through the courses, students will have hands-on experience to prepare them for the exam that will prove their data security analyst skills. Jobs that utilize this certificate include security, threat intelligence, and application security analysts, incident response handlers, security engineers, threat hunters, and compliance analysts. Credits and hours required for completing this course are in the works. The CertMaster Integrated Learn and Labs takes approximately 36.6-38.6 hours, and the CertMaster Practices takes between 13-15 hours to complete. This course has a cost of \$448 per student in attendance.