## Clairton High School



# Program of Studies \& Course Descriptions 

## 2022-2023

# CLAIRTON HIGH SCHOOL 501 Waddell Avenue Clairton, PA 15025 

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FORWARD
This program of studies will provide students and parents/guardians of the Clairton City School District a description of the various course offerings available to students in grades nine (9) through twelve (12). The information is made available so students may select courses to meet their individual needs, interests, and career goals. Courses should be selected with a plan that includes the entire high school sequence in order to ensure graduation from high school as well as the best preparation for post-secondary education and/or employment.

Please review the course offerings carefully to be certain courses selected are those needed to fulfill graduation requirements. Keep in mind that the courses selected for a given school year will be critical in reaching post-secondary goals and securing academic success. Students and parents/guardians are urged to consult with the Counseling Office whenever questions arise with educational planning.

## SCHEDULE PLANNING

The Clairton City School District has the following credit requirements for graduation:

English, 4 credits
Mathematics, 4 credits
Science, 4 credits
Social Studies, 4 credits
Health, $1 / 2$ credit

Fine Arts, 2 credits
Physical Education, 2 credits
Career Exploration, $1 / 2$ credit
Career and College Planning, $1 / 2$ credit
Electives, $41 / 2$ credits

Total Minimum: $251 / 2$ credits
Successfully planning a student schedule with appropriate high school courses requires an appraisal of individual capabilities, interests and goals, as well as, familiarity with the various curricula and courses of study recommended for each year. For instance, in mathematics, the recommended progression for students would include Algebra I, Algebra II, Geometry, and then Trigonometry/Pre-Calculus. Additional decisions may still need to be made as some students may also take Calculus. This progression would require a student to take Algebra I in $8^{\text {th }}$ grade or take Algebra II and Geometry during the same year in high school.

There is great diversity in college, university, and school entrance requirements, particularly in the field of mathematics and foreign languages. Specific mathematics courses might be required in addition to the total number of credits earned. Foreign language requirements vary from no language requisite to four years of study. Sometimes the requirements for different degree programs in the same college are not identical. Also, students who hope to seek sports acceptance and scholarships should pay close attention to the NCAA rules and regulations regarding academics and overall records listed at the end of this booklet.

Students who intend to participate in post-secondary education must be prepared to meet rigid patterns of specific subject requirements. Such a variance in entrance requirements makes it important for students to plan early in their high school years to prepare for the careers they will pursue as adults. It is important to refer to entrance requirements in the sophomore year. There is some flexibility in the electives a student may select, but much less with the core subjects.

## SCHEDULING PROCEDURES

1. All students will be given Program of Studies booklets, registration and group counseling during English classes in the spring of each school year. Students will choose courses via an online selection process with the assistance of their School Counselor.
2. Students and parents should discuss their tentative educational plans for post-secondary choices before deciding which courses will be selected. Parents/guardians will be sent a listing of the courses once the student has completed the selection process.
3. It is the responsibility of the student to include and reschedule required courses from previous semesters for which credit was not received.
4. If the parent/guardian wants to suggest changes to the course selections, the Counselor will be available to answer any individual questions. Please call (412)233-9200 Ext. 1237 as soon as possible. Once the schedule is formatted, changes become very difficult to accommodate, and may be denied.
5. All students attending Clairton High School must be scheduled for eight (8) credits per day. Students who attend Steel Center Area Vocational Technical School must select a minimum of five (5) credits per day.
6. It is important to consider your Career Pathway according to the Career Clusters when choosing courses.

## Career Pathways According to the Career Clusters



## CHANGING/DROPPING COURSES

Parents/guardians and students should give serious consideration to course selection in the early spring of each school year. Once school begins classes will not be changed or dropped unless the principal, counselor, teacher and/or parents/guardians feel it is warranted. Final approval for course selection rests with the building principal. It is with this in mind, that course selections must be made carefully. In general, once the school year begins, course(s) will not be dropped from a student's schedule after final necessary changes have been made.

In order for a student to be promoted to the next grade, the student must successfully complete the required number of credits listed below. Those students who do not have the required number of credits by the end of summer will be retained.

Credits needed to become a: Sophomore $61 / 2$
Junior 12
Senior $\quad 19$ ½
Total to Graduate $\quad 25$ ½

## CREDIT RECOVERY

Students who need to recover credits due to failed course(s) during the prior school year must recover the credit(s). Courses can be taken at approved sites at the family's expense. The Guidance Office has information regarding the approved credit recovery programs. The student is responsible for having the transcript sent to the Clairton High School's Guidance Office, prior to the end of summer so records may be completed accurately. The student and parent/guardian must recognize that this process recovers the credit, it does not impact G.P.A.

Clairton City School District may offer Keystone Intervention during the summer, but it does not serve as a credit recovery program. The purpose of the summer sessions offered are to reinforce skill development and lead to higher proficiency on state assessments, which are required for graduation. Students who do not demonstrate proficiency are enrolled in Summer School to develop their skills in Algebra I, Literature, or Biology. The only way a student can secure promotion to the next grade level is to successfully pass all required courses and strive to demonstrate proficiency on all Keystone Exams.

## PREREQUISITES AND REQUIREMENTS FOR COURSES

Academic Rubric for Course Selection

| Course | Keystone | Grades | Teacher Referral | Writing Sample |
| :---: | :---: | :---: | :---: | :---: |
| College/AP <br> Level <br> courses | Advanced <br> or <br> Proficient | B average or <br> higher in <br> prior year | Confidence of <br> consistent high <br> performance | Required |
| Academic <br> course | Proficient | B average or <br> better in prior <br> year | Positive referral <br> required | May be required <br> or requested |
| Regular <br> course | N/A | Passing <br> grade in <br> prior year | N/A | N/A |
| Elective <br> course | Proficiency or <br> better may be <br> needed | Passing <br> grade in <br> prior year | Positive referral <br> required | May be required <br> or requested |
| Proficiency <br> courses | Below <br> Proficient | N/A |  <br> checked with <br> Counselor | N/A |

## CLAIRTON CITY SCHOOL DISTRICT

## OUR MISSION

The Clairton City School District will prepare all students to be career and college ready by fostering positive relationships, providing rigorous academic experiences, and technology-rich opportunities in a collaborative environment.

## OUR VISION

Students will graduate from the Clairton City School District having developed the knowledge, skills and dispositions required for $21^{\text {st }}$ Century success as defined by our Portrait Of A Graduate.


## *Please note the Portrait of a Graduate Icons and PA Mandated Career Portfolio Icon (listed above) will be placed beside each course that addresses those skills.

## COLLECTIVE COMMITMENTS

The Clairton City School District community is committed to Every Student, Every Day...

- Challenging all learners to think critically and creatively
- Making learning more engaging, relevant and meaningful
- Developing collaborative leadership
- Promoting continuous improvement through data-driven decision making
- Creating an educational environment with high expectations for learning and collaboration
- Providing safe, clean, and healthy environments
- Promoting equity and inclusiveness
- Sustaining positive relationships and interactions among all relevant stakeholders: students, staff, families and community member


## CLAIRTON CITY SCHOOL DISTRICT

## Portrait of a Graduate

Clairton graduates will develop the knowledge, skills, and dispositions required for $\mathbf{2 1}^{\text {st }}$ Century success.
\(\left.$$
\begin{array}{ll}\text { CREATIVITY } & \begin{array}{l}\text { - Use a wide range of idea creation technologies (such as brainstorming, divergent \& } \\
\text { convergent thinking) }\end{array}
$$ <br>
- Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize <br>

creative efforts\end{array}\right]\)| Demonstrate originality and inventiveness in work and understand the real world limits to |
| :--- |
| adopting new ideas |
| - Vailure as an opportunity to learn, understand that creativity and innovation is a |
| long-term cyclical process of small successes and frequent mistakes |
| - Act on creative ideas to make a tangible and useful contribution to the field in which the |
| innovation will occur |



## CollegeBoard Advanced Placement Program

## ADVANCED PLACEMENT (AP) COURSES

Advanced Placement courses are taught at the college level and are also intended to possibly substitute for college credit. These courses are offered for students in $11^{\text {th }}$ and $12^{\text {th }}$ grades with teacher recommendation and grade prerequisites. Each course has a 5 point weighting. Advanced Placement courses are rigorous college-level courses, the reading is challenging; the writing is frequent and requires an independent mind. The intention of taking the course is to take the AP Exam given to qualify for credits given in a 4-year college or university.

An asterisk (*) indicates a weighted course - an additional Quality Point will be added to the value of each letter grade in computing class rank (A, B and C grades only). Students should have a cumulative GPA of 3.0 or higher and recommendation from a teacher in the respective content area.


## ENGLISH

* Please note: AP English Classes are offered in alternating years.


## 120 *AP ENGLISH LITERATURE \& COMPOSITION <br> Year 1 credit <br> 11th 12th

The AP English Literature and Composition course trains students to explore possible definitions for the "moral imagination" as it is evidenced in literature from diverse cultures and times. Students will learn to develop independent thought through avid critical inquiry and to enhance writing skills through frequent, challenging assignments. This course will help to create a highly committed, focused, and collaborative community of learners.


121 *AP ENGLISH LANGUAGE \& COMPOSITION
Year 1 credit
11th 12th
The AP Language and Composition course trains students to become skilled readers and writers in diverse genres and modes of composition. As stated in the Advanced Placement Course Description for the English exams, the AP Language and Composition course's purpose is "to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers." As the course progresses, students will become aware of their own composition process through self-assessment and evaluations by peers and the instructor. These skills will allow the student to read critically and write effectively in different modes in the college classroom and beyond.


English 9 includes a detailed study of grammar and includes the parts of speech, the parts of a sentence, the phrase, and the clause. Students will demonstrate a consistent use of effective reading strategies to comprehend both fiction and nonfiction text. They will construct meaning by applying appropriate reading strategies and knowledge of literary terms, structures, and genres. The course explores short stories, novels, poetry, and drama with a focus placed on the techniques and terms involved in each type of literature. In addition, students analyze the author's purpose and techniques, including the effects on the reader. An emphasis is placed upon building quality paragraphs and essays, which are argumentative and informative/explanatory. Students will make and support reasonable assertions and draw conclusions based on textual and contextual evidence.


Year 1 credit


9th

## 102 ENGLISH 9A(Academic)

Academic English 9 is the first course in the Advanced English Program of Studies. The course stresses the essential concepts and skills of the three basic and interrelated areas: literature, language, and composition. The study of literature will introduce the student to meaningful selections of all types. The student will be able to express written and oral ideas about literature in a logical manner, using specific references to the reading for support. The underlying grammatical structure of the English language will be reviewed, and emphasis will be given to the use of this knowledge in writing. Academic vocabulary study will be regular and sequential. Compositions, including narrative, persuasive/argumentative, and informative/expository, will be assigned regularly. Assignments become progressively more complex, requiring increasing concentration of the student's organizational and critical skills.


103 ENGLISH 10
Year 1 credit
10th
English 10 is designed to provide students with the knowledge and skills necessary to meet the challenges of the state-mandated Keystone Literature exam. Students analyze various forms of literature, including fiction, non-fiction, and other mediums on a variety of levels including theme development, author's assumptions and beliefs, complex development, point of view, and its impact on meaning and text structure and rhetoric while using textual evidence and their own life experiences. In addition, students create their own writing samples using academic vocabulary, sufficient facts, concrete details, quotations, and other information with an awareness of projected audience knowledge. They make important connections and distinctions, using varied transitions to link major sections of the text and provide description and evidence in their pieces of writing to create a cohesive and coherent whole in all writing. Students also initiate and engage in meaningful collaborative discussion on grade-level topics heightened by their ability to reason, provide evidence, and evaluate the views of others while exploring their own beliefs and assumptions.


104 ENGLISH 10A(Academic) Year 1 credit 10th
This course is designed to provide students with the knowledge and skills necessary to meet the challenges of the state-mandated Keystone Literature exam. As an academic class, the assignments, pace, and expectations for this course are more rigorous than English 10. Students analyze various forms of literature, including fiction, non-fiction, and other mediums on a variety of levels including theme development, author's assumptions and beliefs, complex development, point of view, and its impact on meaning and text structure and rhetoric while using textual evidence and their own life experiences. In addition, students create their own writing samples using academic vocabulary, sufficient facts, concrete details, quotations, and other information with an awareness of projected audience knowledge. They make important connections and distinctions, using varied transitions to link major sections of the text and provide description and evidence in their pieces of writing to create a cohesive and coherent whole in all writing. Students also initiate and engage in meaningful collaborative discussion on grade-level topics heightened by their ability to reason, provide evidence, and evaluate the views of others while exploring their own beliefs and assumptions.


105 ENGLISH 11
Year 1 credit
11th
English 11 continues to build on necessary reading and writing skills as outlined in the PA Common Core Standards for English/Language Arts. Students will review literature vocabulary and concepts that are assessed on the PA Literature Keystone to help students prepare to retake the assessment. The course is a study of language, literature, and composition with a focus on exploring characterization across universal themes, such as the American Dream, and a wide variety of genres. Students will use literary interpretation, analysis, comparison, and evaluation to read and to respond to representative works of historical or cultural significance appropriate for Grade 11. Students read classic and contemporary literature balanced with nonfiction-- Students examine and compose various types of writing including, literary analysis, satire, synthesis, and narrative as well as deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online and printed information. Regular Keystone Literature remediation will occur in this class for students as appropriate.

106 ENGLISH 11A(Academic) Year 1 credit 11th

Students master previously introduced literature skills. As an academic class, the assignments, pace, and expectations for this course are more rigorous than English 11. Students will analyze various forms of literature, including fiction, non-fiction, and other mediums on a variety of levels including theme development, author's assumptions and beliefs, complex development, point of view, and its impact on meaning and text structure and rhetoric while using textual evidence and their own life experiences. In addition, students create their own writing samples using academic vocabulary, sufficient facts, concrete details, quotations, and other information with an awareness of projected audience knowledge. They make important connections and distinctions, using varied transitions to link major sections of the text and provide description and evidence in their pieces of writing to create a cohesive and coherent whole in all writing. Students also initiate and engage in meaningful collaborative discussion on grade-level topics heightened by their ability to reason, provide evidence, and evaluate the views of others while exploring their own beliefs and assumptions.


## 107 ENGLISH 12

Year 1 credit
12th
This course allows students to integrate interactive reading and writing processes and use a rhetorical approach to texts that fosters critical thinking. Materials and themes in the curriculum engage student interest and provide a foundation for principled debate and argument. You will engage in classroom activities that are designed to model and foster successful practices of fluent readers and writers.

The course requires you to share ideas and work collaboratively in small groups and during whole class discussion. It is designed to help students develop the skills, content, and knowledge of procedures that will prepare them for further education and successful job performance.


108 ENGLISH 12A(Academic) Year 1 credit 12th
Academic English 12 demands a mastery of grammar, writing, and spelling as a prerequisite. Students will complete the requirements for the Senior Graduation Project, which is focused around an in-depth exploration of a career. The Senior Graduation Project involves extensive research and two job shadows, research project, and visual presentation. The students will present this project to the members of the Senior Project Committee. In addition, English literature is examined by the identification of in-depth ideas discovered within the material, as well as the analysis of the techniques of the writers involved. With the reading of multiple supplementary materials, the student will participate in inductive group discussions. The composition work centers around expository, critical, argumentative, and research writing. An extensive research project is a requirement, providing a means for reviewing and refining writing skills.


## 115 PUBLIC SPEAKING (Dual Enrollment College Course) Year 1 credit 11th 12th

Prerequisite: Students must have a cumulative GPA of 3.0 or higher and a recommendation by a member of the English Department. Students will have the opportunity to earn college credits for completion of this course. There is a fee associated with the college credits.

This course focuses on developing skills for students to become in-depth researchers, technical and persuasive writers, effective communicators, and perceptive listeners. Students will research topics, organize theories, write persuasive cases, and learn the principles and methods of effective public speaking.


116 THE HERO'S JOURNEY: FROM SIRENS TO SKYWALKER $1 / 2$ credit 10 th 11th 12th
Students will explore the role of the hero's journey in mythology and how the hero's journey in contemporary works (including film) of fantasy and science fiction have been drawn upon and deviated from the hero's journey found in mythology. Students will also explore the relationship between fantasy and science fiction. Lastly, students will read a number of different texts about the nature and meaning of the hero's journey for different societies.


117 INTRODUCTION TO JOURNALISM Semester $1 / 2$ credit $\quad$ 10th 11th 12th
Introduction to Journalism focuses on those skills and knowledge a beginning journalist needs. Students will become knowledgeable about local and world-wide current affairs, the differences between print and digital journalism, the parts of a newspaper, their rights as citizens and journalists, and media ethics. Students will learn several skills such as searching out a story, interviewing, researching valid sources for strong evidence, writing in inverted-pyramid structure, editing with AP style, speaking in front of an audience, editing video, and using digital formats to reach their audience.


119 CREATIVE WRITING Semester $1 / 2$ credit $\quad$ 10th 11th 12th
The Creative Writing course is designed for students who enjoy writing as a form of art and personal expression. In this course, students will explore the elements of numerous literary genres (short fiction, poetry, drama, film) and the power of both print and multimedia formats. To develop original writing pieces, students will engage in writing workshops, literary element development lessons, writing/author studies, and peer reviews/conferences. To show evidence of writing development throughout the course, students will be required to engage in writing community activities that require sharing one's work.

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118 AT THE MOVIES Semester $1 / 2$ credit 10th 11th 12th
Storytelling is basic to our lives, whether we hear stories, read stories, or watch stories. In this course, students will examine what happens when a story is told through the medium of film. Students will acquire a common film vocabulary, study the history of filmmaking, and identify the steps involved in making a film. Students will watch, discuss, research and critique films from a variety of genres. Students will also compare and contrast the telling of the same story in its film and original text.



## SOCIAL STUDIES

* Please note: AP Government classes are offered on alternating years. The $1 / 2$ credit Social Studies courses may be offered on alternating years based on student requests.


## $\underline{220}$ *AP COMPARATIVE GOV'T \& POLITICS Year 1 credit 11th 12th

AP Comparative Government and Politics provides students with the conceptual tools necessary to develop an understanding of some of the world's diverse political structures and practices. The course encompasses the study of both specific countries and their governments and general concepts used to interpret the political relationships and institutions found in virtually all national politics. Four major countries are studied to provide a foundation for developing paradigms of different types of political systems. A fifth country is studied to examine another source of theory building, as well as understand the political implications of different levels of economic development.

$\underline{221 \text { *AP U.S. GOVT \& POLITICS (Dual Enrollment College Course) Year } 1 \text { credit 11th 12th }}$ Students will have the opportunity to earn college credits for completion of this course and must have a 3.0 cumulative GPA to qualify. There is a fee associated with the college credits.

AP U.S. Government and Politics/American Politics gives students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes.


Civics provides a survey of the workings and development of our political processes from earliest times to the present. It covers the basic facts of our federal, state and local governments, views the people and society of the U.S., examines civil and criminal law, gives an introduction to our economics system and presents a survey of public opinion, pressure groups and propaganda. The course includes reading accompanied by maps, graphs, and photographs. The students will have the opportunity to see how our government evolved and the reasons it works the way it does today. This course is designed to give students a perspective on the structure of government and politics in the United States and introduces a perspective of their rights and responsibilities as U.S. citizens. The students can make a connection between the relevance of the American government and their own lives.


202 ACADEMIC CIVICS
Year
1 credit
In addition to the course description for Civics, the skills of critical thinking, writing, research and group interaction will further be developed. The focus of learning is to develop reading, writing, problem solving and critical thinking skills needed for successful participation in college.



## 203 WORLD CULTURES

Year
1 credit
10th
World Cultures will explore the geography, history, social institutions, economics, political systems, and cultural contributions made by other cultures. The class will help students understand the civilization and culture of nations around the world, their past, their influence on the present, as well as on current events, and the effect of all these processes on the future.


204 ACADEMIC WORLD CULTURES Year 1 credit 10th 11th
This course is offered as an honors choice for students and is offered in alternating years from Academic AmericanCultures. In addition to the course description for World Cultures, skills relevant to college bound students such as map and globe reading, research, writing and group interaction will be explored. Advanced and analytic thinking will be applied to the discussions and writing projects for this course through the use of a variety of in-depth assignments.


205 AMERICAN CULTURES
Year
1 credit
American Cultures explores the role that geography, technology, immigration, political systems, social institutions and cultural influences played in the development of the United States of America's past, their influences on the present, and their possible impacts on the future. This course addresses Industrial America through The Cold War and President Regan's Administration.


This course is offered as an honors choice for students and is offered in alternating years from Academic World Cultures. In addition to the course description for American Cultures, the skills of analytical reading, critical analysis, abstract reasoning and independent research and writing are emphasized to enhance preparation for college study.

## 207 ECONOMICS Year 1 credit



Economics is a study of the American economy which includes exploration of the relevance of supply and demand to wages and prices and the Stock Market and its influence on the economy. The various types of business organizations in the United States are researched, in addition to the advantages and disadvantages of each. Students will also learn about the influence of taxes on the economy, individual and federal and state governments. Topics will also include inflation/C.P.I., the banking system, and Ecology in respect to the cost of environmental protection.


212 SOCIOLOGY Semester $1 / 2$ credit 11th 12th The course will examine issues surrounding our society today. Students will gain a better understanding of themselves and their social world. Students will analyze major social problems in America and study social relations, organization, and change. They will also examine how the actions and interactions of individuals have an effect on society. Students will participate in group activities and complete an in-depth research project on a social issue of their choice.


213 PSYCHOLOGY
Semester
$1 / 2$ credit
11th 12th
This course is designed to give students an introduction to several important topics within the discipline of psychology. Units of study will include Definition of Psychology and Methods of Research; The Individual and Society; Biology and Behavior; Learning and Memory; Issues of Normality and Abnormality. Students will be required to participate in a variety of class activities and to complete independent projects, reaction papers and other types of assessment.


214 CURRENT ISSUES Semester $1 / 2$ credit 10th 11th 12th Current Issues will present information and materials to make students aware of contemporary happenings. Sources of information may include newspaper and magazine articles, radio, and television broadcasts as well as information gathered from the Internet. Students will be required to keep abreast of daily events.


This course is designed to give students information about their legal rights and responsibilities. Students will learn about laws as well as the legal and justice systems. Discussions will include criminal and civil laws, family law, consumer and housing laws, and the rights of citizens in a community. Students will research a legal topic of their choice and present their information to the class and an invited audience as appropriate.


216 AMERICAN HISTORY THROUGH FILM Semester $1 / 2$ credit 10th 11th 12th American History Through Film will explore how geography, technology, immigration, political systems, and social institutions shaped this nation. The student will explore specific historical events, first through primary sources to build vocabulary and knowledge of the political and social concerns and outcomes of the event, secondly through the entertainment industries retelling of the event in order to identify how the event was manipulated to reflect the political and social concerns at the time of production. This course is writing intensive and research oriented. Students will be required to record concrete evidence and construct abstract level reflections.


## 217 MICROECONOMICS:ENTERPRISE Semester $1 / 2$ credit 11th 12th

Microeconomics is the study of how individuals can make decisions that affect a small business or local economy. This class will see students working collaboratively as well as in direct competition to design products for businesses, establish marketing, and perform logistics for releasing a product. Students will be reinforced in the following skills during this course: personal finance, loan obtainence and repayment, business management, product design, marketing and consumer psychology, and product disbursement. Students will be assessed via project based learning in which they will enhance social skills that involve teamwork via problem solving and competition. The goal of these collaborations is to help students enrich their knowledge of the inner workings of the business world.

$\underline{218}$ *AP MACROECONOMICS Year 1 credit 11th 12th
Students may have the opportunity to earn college credits for completion of this course and must have a 3.0 cumulative GPA to qualify. There is a fee associated with the college credits.

AP Economics is the study of the American economy which includes exploration of micro and macroeconomics. Topics for this rigorous course will include the relevance of supply and demand to wages and prices, business organization and their influence on economic policy, and the stock market's influence on the economy. The course will also place heavy emphasis on students' understanding of the influence of taxes on individuals, government systems (local, state, and federal), and the economy as a whole. Students will be introduced to the concept decisions that must be made at both micro and macro levels and how they influence personal finance decisions, the economy as a whole, as well as the destruction or preservation of Earth's ecosystems.



## MATHEMATICS

300 ALGEBRA I
Year
2 credits
9th
Students study the properties of real numbers that serve as the foundation of arithmetic, expanding and applying them to simplify algebraic expressions. The course applies these properties to solve algebraic linear equations and systems of linear equations, as well as absolute value equations and quadratic equations. Students also use these properties to simplify polynomial expressions. A main focus is to apply these thought processes, expression models, and equation models to real-world problem-solving situations. Course content is designed to prepare students for the Keystone Algebra Exam, which is required for graduation.


303 ALGEBRA I
Year
1 credit
9th 10th
This course is designed for students who have already been exposed to the fundamentals of Algebra, but are still working towards proficiency on the Keystone Algebra I Exam. Algebraic concepts of determining slope, determining and graphing linear equations, solving systems of linear equations, and determining patterns of series numbers are covered.


## 306 ALGEBRA II

Year
1 credit


Students build on previously mastered algebraic and geometric concepts. They develop advanced algebra skills such as investigating systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, and concepts, including the study of trigonometric functions. Students examine matrices and their properties. Keystone Algebra remediation will occur in this class for students as needed.


This course is designed to provide an understanding of geometric principles. Topics include: deductive and inductive reasoning; direct and indirect proof; parallel and perpendicular lines; area, circumference, and perimeter; triangle congruence; similarity of geometric figures; trigonometry; and transformations. Regular Keystone Algebra remediation will occur in this class for students as needed.


307 TRIGONOMETRY/PRE-CALCULUS Year
1 credit
11th
12th
Trigonometry/Pre-Calculus is a full year course combining studies in advanced mathematical concepts to prepare those students who intend to continue with Calculus or who are preparing for college. Topics covered include: Advanced algebra, analytical geometry, exponential functions, logarithmic functions, arithmetic progressions, geometric progressions, matrix operations and trigonometric functions defined as right triangles and real numbers.


309 *CALCULUS
Year
1 credit


Students will gain the knowledge and skill to understand differential and integral calculus as they simultaneously strengthen and apply skills involving algebraic, pre-calculus and trigonometric concepts to higher level mathematical functions. Topics focus on method, process and application. This is a college level course and students will receive a weighted grade like an AP class for this course.


320 *AP STATISTICS
Year
1 credit
11th 12th
The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- Exploring Data: Observing patterns and departures from patterns
- Planning a Study: Deciding what and how to measure
- Anticipating Patterns: Producing models using probability theory and simulation
- Statistical Inference: Confirming models

Students who successfully complete the course and the College Board examination may receive up to 3 college credits, advanced placement, or both for a one-semester introductory college statistics course.


## 321 PRACTICAL MATH APPLICATIONS Year 1 credit

This course presents more difficult and complex applications of algebraic concepts for students who may require in-depth and individual attention with hands-on activities and problem solving using integers, fractions, decimals, ratio, proportions, single step and expanded equations, measures and probability and statistics. Applications may also include real-world scenarios related to banking, credit, taxation and investment as it applies to personal income.


## 322 PERSONAL FINANCE/FINANCIAL PLANNING Semester $1 / 2$ credit 11th 12th

This elective course will explore a variety of topics related to personal finance and financial planning. Real world topics covered will include income, money management, spending and credit, saving and investing, debt and credit management, and understanding insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence. Guest speakers who work in the financial world will be engaging students on various topics related to financial literacy.



## SCIENCE

401 EARTH SCIENCE
Year
1 credit
9th
This course looks at the relationship of Earth's processes and how they work together to create homeostasis for living organisms. It will incorporate the history of the Earth, changes in climate, the diversity of our Biomes and how humans have had their impact.


402 GENERAL BIOLOGY
Year
1 credit
9th
Students improve their scientific thinking by evaluating the application of scientific reasoning, inventions, tools, and new technologies in the study of biology. They evaluate the processes and outcomes of mitosis and meiosis, and they predict how genetic information could be inherited, expressed, and altered. Students apply scientific processes to interpret evidence that can explain the mechanisms of evolutionary theory. Course content will prepare students for proficiency on the PA Keystone Exams required for graduation.


## 414 BIOLOGY LAB

Semester
$1 / 2$ credit
Biology Lab is a course taken in conjunction with General Biology. In this course, students will take a more indepth look at the biological concepts of biochemistry, bioenergetics, cell cycle and reproduction, genetics, the theory of evolution, and ecology. This class, paired with General Biology, will allow you to take a more hands-on approach to your learning and preparation for the Keystone Biology Exam.

404 ZOOLOGY/BOTANY Year 1 credit 10th 11th 12th

Students improve their scientific thinking by evaluating the application of scientific reasoning, inventions, tools, and new technologies in the study of Zoology and Botany. The first semester focuses on the major divisions of the animal kingdom, in addition to an in-depth study of invertebrates and vertebrates. The second semester is dedicated to the study of Botany, in which students will implement lab-based skills to grow plants in various environments, monitor the growth when environments change, and analyze how terrestrial and aquatic environmental factors influence the growth of plants. This course is designed for students who have yet to pass the Keystone Biology Exam. During this course, students will be reinforced in the following keystone standard aligned concepts: basic biological principles, biochemistry, homeostasis and transport, bioenergetics, cell cycle and reproduction, genetics, the theory of evolution, and ecology.


406 GENERAL CHEMISTRY Year 1 credit 10th 11th 12th
Prerequisite: In order to take this course, students must have successfully completed and understand Algebra I. This course offers a comprehensive and relevant approach to Chemistry that begins with some descriptive chemistry as well as the "mechanics" and basic vocabulary needed to help understand more complex concepts. The mole concept is introduced early and time is devoted to the structure of matter and the periodicity of the elements. Matter is also covered in terms of acidity, oxidation reduction, and electric potential. The course concludes with descriptive material in nuclear, organic, and biochemistry. The program is designed to help students develop a better understanding of their physical world.

## 407 ACADEMIC CHEMISTRY



Prerequisite: In order to take this course, students must have successfully completed and understand Algebra I. This course is described as being concerned with the composition of matter and the transformations it undergoes. It is divided into five basic sections: Organic Chemistry, Inorganic Chemistry, Analytic Chemistry, Physical Chemistry, and Biochemistry. To help understand some of the principles of chemistry, students will problem solve using the factor/unit (factor/label) method, as well as drill problems. The use of tasks and objectives as a method of study will be employed. Laboratory work emphasizes basic scientific procedures in the handling of scientific data and illustrates typical techniques used in the study of chemical problems.


A successful completion of Trigonometry/Pre-Calculus is highly recommended. In this course a logical, sequential development of major principles starting with mechanics, the study of the fundamental aspects related to all of physics is explored. The major areas of physics are studied: Heat, Optics, Electricity, Magnetism, Quantum Theory, and Atomic Physics. Optics is preceded by a treatment of wave theory; a treatment of electron excitation and lasers is included. Two-dimensional motion includes a section on orbiting satellites and power production by reactors is also included. The problem-solving technique is applied consistently and develops the student's ability to interrelate the major concepts of physics.


409 ANATOMY AND PHYSIOLOGY Year 1 credit 11th 12th
Anatomy and Physiology is an introductory-level course that investigates the structure and function of the human body. Topics covered will include the basic organization of the body and major body systems along with the impact of diseases on certain systems. Students will engage in many topics of basic anatomical terminology to the biochemical composition of the human body, all the way into great detail of each of the major systems of the body. The main objective of this course is to prepare students with the skills necessary to be successful in future science classes in college and medical fields. This course is offered to those students who have passed the Biology Keystone Exam.


410 *AP ENVIRONMENTAL SCIENCE Year 1 credit 11th 12th Students will explore and investigate the interrelationships of the natural world, identify and analyze environmental problems, both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Students will participate in hands-on, laboratory and field investigations to apply scientific principles, concepts, and methodologies in order to better understand our natural systems and to critically think about environmental issues and potential solutions

411 *AP COMPUTER SCIENCE Year 1 credit 10th 11th 12th

AP Computer Science is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. This course is offered to those students who have successfully passed their Biology and Algebra Keystone Exams.


412 *AP BIOLOGY
Year
1 credit
11th 12th
AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes-energy and communication, genetics, information transfer, ecology, and interactions. This course is offered to both junior and senior level students who have successfully passed the Biology Keystone Exams and the Chemistry level course.



## WORLD LANGUAGES

501 SPANISH I Year 1 credit 9th 10th 11th 12th

Spanish I is designed to teach students the elements of pronunciation, vocabulary and basic grammatical structure including the most common tenses and the most frequently used vocabulary between 900 and 1500 words. Emphasis is placed upon the ability to read and comprehend Spanish as well as the ability to speak it and write it. Audio and visual resources provide natural contexts for students to see and hear native speakers in real life situations.


502 SPANISH II
Year
1 credit
10th 11th 12th
This second year Spanish course is designed to reinforce and add to the language learned in Spanish I. The student will be able to converse, expressing his ideas and feelings using basic structures.


503 SPANISH III
Year
1 credit
11th 12th
The student will demonstrate the ability to read, comprehend and write Spanish with increasing ease. Cultural patterns and values related to Hispanic civilization (Spain and Latin America) will be presented.


504 SPANISH IV
Year
1 credit
12th
The purpose of the fourth-year course is to help students strengthen their command of spoken and written Spanish and to appreciate short literary pieces of recognized Hispanic authors. In this course, the students will also acquire cultural competency by broadening their knowledge of the 21 Spanish-speaking countries.



HEALTH \& PHYSICAL EDUCATION
601 HEALTH EDUCATION Semester $1 / 2$ credit 9th 10th-
Students acquire the knowledge and attitudes necessary to achieve or maintain overall health and well-being. The course is designed to achieve three major instructional objectives. Students will develop motivation for achieving or maintaining their potential level of health through the concepts presented. The course also provides students with a framework in the areas of heredity; health problems of the present and future; the skeletal, circulatory, and reproductive systems; nutrition; dependency and addictive-type substances; mental and social health; safety and first aid; and infectious diseases. The final objective is to provide students with information that serves as a basis for developing the knowledge and attitudes necessary for achieving or maintaining their potential level of health.


## 609 PHYSICAL EDUCATION Semester $1 / 2$ credit 9th 10th 11th 12th

Physical Education provides for the physical, mental and social development of every student. Students will be exposed to sports, games, rules and information in an effort to promote life-long physical activity. This course provides a co-educational atmosphere with considerations given to activity and skill level. All activities are based on active student participation in the areas of skill development, individual accomplishment and team play. In compliance with graduation requirements, this course must be satisfactorily completed each year of the high school experience. Students are required to purchase and wear a district endorsed uniform during all physical education classes.



## CAREER AND COLLEGE READINESS

112 READING COMPREHENSION Year 1 credit 9th 10th 11th

This course is designed to improve vocabulary, critical thinking and analysis skills, reading rate and comprehension levels. Participation in computer assisted learning, independent reading of fiction and non-fiction, and small group work assist students to independently apply critical thinking skills. Students will be able to improve literal and inferential comprehension, apply analytical skills to real-life situations, and evaluate sources of information to appropriately use information resources.

## 148 CAREER EXPLORATION Semester $1 / 2$ credit 9 th 10th 11th

This course is required in order to meet graduation requirements. It will build upon the career interest inventory that the students have completed in 8th grade. It will directly focus on the top careers for individual students. Students will research careers of interest utilizing the Occupational Outlook Handbook, PA CareerZone, and other resources. Students will research work habits, salaries, job duties, etc. In addition, they will research potential colleges that offer programs in their field of interest. Students will be required to create working resumes, cover letters, and reference pages that can be added to their portfolios. Students will also be provided with the opportunity to see career speakers that are related to their field of interest and representatives from various colleges and other post-secondary institutions. Students will have the opportunity to earn a college credit through CCAC by taking this course.


## 149 CAREER AND COLLEGE PLANNING Semester $1 / 2$ credit 11th

This course is required for all students to meet graduation requirements. Students who attend Steel Center for at least three years or complete at least three school approved job shadows by February of their 10th grade year will not be required to take this course. During this course, students will be required to complete three job shadowing experiences for a minimum of three hours each related to a career for which they are interested or another Work-based learning experience.. During the job shadows, students will be required to complete observations, interviews, and reflections which they will use to support the development of a culminating project. Students will add this information to their state mandated career portfolios.


## STEM/COMPUTER APPLICATIONS

## 701 COMPUTER PROGRAMMING- PYTHON Semester $1 / 2$ credit 9th 10th 11th 12th

This course is an introduction to the Python programming language for students without prior programming experience. The class will cover data types, control flow, object-oriented programming, and graphical user interface-driven applications. The examples and problems used in this course are drawn from diverse areas such as text processing, simple graphics creation and image manipulation, HTML and web programming.


411 *AP COMPUTER SCIENCE Year 1 credit 10th 11th 12th
AP Computer Science is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. This course is offered to those students who have successfully passed their Biology and Algebra Keystone Exams.



## TECHNOLOGY EDUCATION

## 753 SHOP I/II/III/IV Semester $1 / 2$ credit 9th 10th 11th 12th

Students will gain a basic understanding and insight into multiple facets of technology education. Learning will be hands-on and differentiated based on students' prior knowledge of Woodworking, Foundry, Machining Processes, Small Engine Repair and Electricity, Electronics, and Fluid Power Training. Students who continue with Shop II, Shop III, and Shop IV will have the opportunity to focus on one or more areas of industrial technology; applying technological processes to solve real problems; and developing the knowledge and skills to design, modify, use, and apply technology appropriately. Students may examine case studies, explore simulations, or design and build prototypes and working models.


757 DISTRICT PRODUCTION A/B Semester $1 / 2$ credit 11th 12th
This course will provide the student with design and layouts used to improve the school's physical plant and enhance student presentations and performances.


759 ROBOTICS, POWER, ENERGY Year 1 credit 9th 10th 11th 12th
The Robotics course will develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers. This course will introduce students to the various fields of technology. This course will offer students a look into the fields of communication, transportation, electronics, construction, robotics, and computer applications.

Because of the support of the Will Allen Foundation, in this course, students will learn to build robots, develop themselves and change their community. This course combines the hard science of robotics with the essential skills of social emotional learning. The Electrical Foundations Program(from CMU) prepares students for jobs in the emerging field of technology. Students receive basic robotics skills in a self-paced curriculum focused on wiring, circuits, voltage, currents, motors, control signals, sensors and e-panels. Students will also participate in an evidence-based social emotional learning program, Wyman Teen Outreach Program (TOP). TOP has been proven to improve life skills, academic outcomes and lower risky behaviors. Students will develop a positive sense of self and learn to connect with others. This course is designed to build educational success, life and leadership skills and equip students with the skills of the future.Course includes: Educational Field Trips, Guest Speakers and Community Service Learning projects.


760 INTRODUCTION TO MANUFACTURING Semester $1 / 2$ credit 10th 11th 12th
Introduction to Manufacturing will implement the BotsIQ Academy's Intro to Manufacturing curriculum. These 25 introductory courses enable students to develop their knowledge and complete industry competencies to obtain certificates for skills most relevant to our current and future manufacturing industry. The Academy includes online courses in basic measurement and math, blueprint reading, safety, and Computer Assisted Drawing and Design. This course will be further supported by speakers and site tours. The objective of this course is to familiarize students with a variety of manufacturing careers and technical skills relevant to thousands of local jobs and to set the groundwork for students to continue on a pathway that can lead to entry-level positions and/or paid apprenticeships.



MUSIC EDUCATION
801 MARCHING/CONCERT BAND Year 1 credit 9th 10th 11th 12th
This course is designed to develop the mental discipline and physical coordination necessary for students to perform in a marching and concert band. The course develops student musicianship and technical instrumental music. Previous musical training is essential. The course begins with attendance at band camp which begins approximately two (2) weeks before the regular school calendar. With proper notice, rehearsals and mandatory performances may be scheduled after school hours or in the evening at the discretion of the instructor.

802 CHORAL MUSIC
Year
1 credit
9th 10th 11th 12th

Students study basic singing techniques and the basic elements of music. The music is of a varied nature including sacred, secular, Broadway and popular songs. With proper notice, rehearsals and mandatory performances may be scheduled after school hours or in the evening at the discretion of the instructor.

## 803 MUSIC APPRECIATION Semester



Students study many different styles of music from a multitude of time periods. Music is part of everyday lives, and students will be exposed to music from other cultures and countries. The role of music in their own lives will also be discussed. The course will provide students with an aesthetic and historical perspective of music, covering a variety of styles and developments.


807 CHORAL MUSIC
Semester
Students study basic singing techniques and the basic elements of music. The music is of a varied nature including sacred, secular, Broadway and popular songs. With proper notice, rehearsals and mandatory performances may be scheduled after school hours or in the evening at the discretion of the instructor.


805 APPLIED MUSIC LESSONS Semester $1 / 2$ credit 9th 10th 11th 12th
Students interested in learning to play an instrument or improve their playing of an instrument are encouraged to choose this course. This course will qualify as a $1 / 2$ credit towards their Fine Arts/Technology requirement for graduation. Students will learn basic music theory and will practice their chosen instrument with guidance and direction from the instructor. This semester long $1 / 2$ credit course will provide students the opportunity to gain enough competency to perform in small group performances and to prepare for joining the high school band, if they so desire.


806 MUSIC TECHNOLOGY A/B Semester $1 / 2$ credit 9th 10th 11th 12th
The music technology course focuses on combining student creativity with modern technology. The course is primarily a project based course. Students will be exposed to midi and notation software so they can produce, record, edit, sequence, mix and experiment with prerecorded or their own music. Students will also learn how to imbed music into Microsoft Office documents and presentations.


## ART EDUCATION

848 STUDIO ARTS I/II/III/PORTFOLIO Semester $1 / 2$ credit 9 th 10th 11th 12th This course is recommended for students who have an interest in traditional art production. It provides students with fundamental knowledge and diverse experience. This course encourages students to develop their natural artistic talents. Students will have the opportunity to express their individual talents by completing a variety of unique and challenging projects in a multitude of traditional media. Assignments emphasize design, craftsmanship, and problem solving. Units explore the fundamentals involved in painting, perspective, art history, drawing and shading, color theory, printmaking, sculpture, and pattern. Students who continue with Studio Arts II/II/Portfolio will continue to refine their skills and implement new mediums with their projects.


854 DIGITALARTS I/II/PORTFOLIO Semester $1 / 2$ credit 9th 10th 11th 12th
This course focuses on the use of the computer as a creative tool of art. The history, the nature, and the function of computer graphics will be addressed. Students will become familiar with a variety of graphic arts software. The development of skills in digital drawing, digital photography, and 3D printing will be explored.

861 YEARBOOK I/II Semester $1 / 2$ credit 9th 10th 11th 12th

This course is designed to teach the skills necessary to produce the school yearbook, which offers a complete record of the entire year. The year begins by planning the coverage for the year and designing a unifying theme for the book. Students will study magazine journalism including layout and design techniques, writing and editing copy, headlines and picture captions. This course provides the study of and practice in gathering and analyzing information, interviewing, note taking and photography. Students will learn strategies of planning, marketing (ad sales) and distribution of the yearbook. Students will learn proofing strategies and work independently with photographers. At times, deadlines require that staff members work after school, on weekends, and holidays.


863 ART APPRECIATION (Dual Enrollment College Course) Year 1 credit 11th 12th
Prerequisite: Students must have a cumulative GPA of 3.0 or higher and a recommendation by a member of the Art Department. Students will have the opportunity to earn college credits for completion of this course. There is a fee associated with the college credits.

This course is an introduction to the historical aspect of the visual arts. The student's appreciation of art will be developed through aesthetics, disciplines, critical evaluations, projects, history and attendance at a real or virtual art show.


## OFFICE DUTY

1400 OFFICE DUTY Semester $\quad 1 / 2$ credit $\quad$ 12th

Students who have met all requirements for graduation and are approved by the principal and guidance counselor may choose Office Duty. Students are assigned to a specific office, department, or location to assist with various daily tasks. Students assigned to Office Duty must sign a Written Agreement, which outlines required expectations.


1401/1402 EARLY RELEASE Year or Semester 1 credit or $1 / 2$ credit 12th
Students who have met all requirements for graduation and are approved by the principal and guidance counselor may choose Office Duty. In some cases, students may be able to receive an $9^{\text {th }}$ period Office Duty and could be permitted to have an early release for $9^{\text {th }}$ period only.


## STEEL CENTER FOR CAREER AND TECHNICAL EDUCATION

Students who attend Steel Center can gain a labor market advantage through active learning that meets the expectations of $21^{\text {st }}$ century employers and colleges. Each program will guide students through rigorous career oriented practical activities reinforced through core academic instruction. Students' employability will be further promoted by their opportunity to gain Industry Standard Certifications required by local employers. Students also have the opportunity to join a Career and Technical Student Organization where they will learn leadership and citizenship principles. For more information about the opportunities offered at Steel Center, please visit www.steelcentertech.com.

PA DEPARTMENT OF EDUCATION PROGRAMS OF STUDY
In accordance with the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Act), all Postsecondary Institutions receiving funds under the Act are required to award college-level credit or equivalent clock hours to a matriculated student and apply that credit toward the completion of the approved Pennsylvania Department of Education (PDE) Program of Study, leading to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. The purpose of this Agreement is to ensure that students make the transition from a school entity (Steel Center) to another school entity, college or university or a business/industry without experiencing delays in or duplication of learning. This Agreement sets forth the terms and conditions for the awarding of college-level credit or equivalent clock hours to students who complete the approved PDE Program of Study at a Secondary School so that those students can seamlessly continue their education in a related Program of Study at a Postsecondary Institution. This agreement outlines the general conditions between secondary and postsecondary institutions.

Steel Center offers 15 career majors. Each major is based on state-approved curricula, inclusive of written (theoretical) activities, performance tasks, demonstration of work ethic, and professionalism. For each major, students may earn three (3) or more Carnegie Units (credits) per year, depending on local sending school district policies for credit acquisition. Students may also earn industry certifications in respective programs. Steel Center's career majors are as follows, listed alphabetically by local title and accompanied by Pennsylvania Classification of Instructional Program (CIP) codes:
924 ADVERTISING \& DESIGN $\quad$ Year 3 credits $\quad$ 10th 11th 12th

CIP Code: 50.0402
Industry Certifications Available: Adobe Certified Associate in Photoshop CS6, Illustrator CS6 \& InDesign CS6, NOCTI Skills Testing Certification

An instructional program in the applied visual arts that prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of printed media. This program includes instruction in concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.
 CIP Code: 47.0604
Industry Certifications Available: Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, NOCTI Skills Testing Certification

An instructional program that prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes instruction in the diagnosis and testing, including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems and drivetrain and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, drive trains, fuel system components and air conditioning and includes the use of technical repair information and the state inspection procedures.
 CIP Code: 12.0501
Industry Certifications Available: : ServSafe Manager Food Safety, ServSafe Food Handler, S/P2 Culinary Safety and Pollution Prevention, NOCTI Skills Testing Certification

Specialized classroom and practical work experiences associated with the preparation of breads, crackers, cakes, pies, pastries and other bakery products for retail distribution, for consumption in a commercial food service establishment or for special functions. Instruction includes making, freezing and handling of baked products; 2 decorating; counter display; and packaging of merchandise. This is a comprehensive program to prepare individuals for employment in a variety of occupations in the baking industry.
936 BUILDING TRADES MAINTENANCE $\quad$ Year 3 credits $\quad$ 10th 11th 12th

CIP Code: 46.0401
Industry Certifications Available: NOCTI Skills Testing Certification, Pennsylvania Builder's Association Certification (PBA), OSHA-10 Hour Training CareerSafe

An instructional program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to serve a variety of structures including commercial and industrial buildings and mobile homes. Instruction includes the basics of carpentry, millwork, plumbing, painting, glazing, electricity, plastering, welding, minor sheet metal, concreting, bricklaying, tile setting, hardware usage, heating, ventilation, waterproofing, roofing and record keeping.

942 CARPENTRY 3 credits $\quad$ 10th 11th 12th
CIP Code: 46.0201
Industry Certifications Available: NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA), OSHA-10 Hour Training CareerSafe

An instructional program that prepares individuals to apply technical knowledge and skills to lay out, fabricate, erect, install and repair structures and fixtures using hand and power tools. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques.


927 COLLISION REPAIR AND REFINISHING Year 3 credits 10th 11th 12th CIP Code: 47.0603
Industry Certifications Available: Collision Safety \& Pollution Prevention (S/P2), NOCTI Skills Testing Certification

An instructional program that prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic window and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or unibody structures using hydraulic jacks and pulling devices; and file, grind and sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with a primer and finish coat.

945 COMPUTER TECHNOLOGY Year 3 credits $\quad$ 10th 11th 12th

## CIP Code: 15.1202

Industry Certifications Available: NOCTI Skills Testing Certification

An instructional program that prepares individuals to apply basic engineering principles and technical skills in support of professionals who use computer systems. This program includes instruction in basic computer design and architecture, programming, problems of specific computer application, component and system maintenance and inspection procedures, hardware and software problem diagnosis and repair and report preparation.


## CIP Code: 12.0401

Industry Certifications Available: Cosmetology License, Manicurist, Esthetician, NOCTI Skills Testing Certification

An instructional program that prepares individuals to apply technical knowledge and skills related to experiences in a variety of beauty treatments including the care and beautification of the hair, complexion and hands. Instruction includes training in giving shampoos, rinses and scalp treatments; hair styling, setting, cutting, dyeing, tinting and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations are also emphasized. Instruction is designed to qualify pupils for the licensing examination.


CIP Code: 12.0508
Industry Certifications Available: ServSafe Manager Food Safety, ServSafe Food Handler, S/P2 Culinary Safety and Pollution Prevention, NOCTI Skills Testing Certification

An instructional program that prepares students for employment related to institutional, commercial or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instruction skills are provided to individuals desiring to become employed in all areas of the food service industry at entry level.

972 DIESEL TECHNOLOGY Year 3 credits 10th 11th 12th

CIP Code: 47.0613
Industry Certifications Available: Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, SP/2 Heavy Duty Safety and Pollution Prevention, NOCTI Skills Testing Certification
A program that prepares individuals to apply technical knowledge and skills to the specialized maintenance and repair of trucks, buses, and other commercial and industrial vehicles. Includes instruction in diesel engine mechanics, suspension and steering, brake systems, electrical and electronic systems, preventive maintenance inspections, drive trains, HVAC systems, and auxiliary equipment installation and repair.


954 ELECTRICAL CONSTRUCTION Year 3 credits 10th 11th 12th CIP Code: 46.0399
Industry Certifications Available: NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA)
An instructional program that prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program.


965 EXERCISE SCIENCE AND REHABILITATION SERVICES -NEW 3 credits 10th 11th 12th CIP Code: 51.2604
Industry Certifications Available: To be determined, but may include the following: American Heart Association (AHA) Heartsaver First Aid, AHA CPR, HIPAA Certification, American Medication Certification Association (AMCA) Physical Therapy Aide, \& Pennsylvania Skills Certification
A program that prepares individuals to assist in rehabilitation services under the supervision of physical therapists, occupational therapists, speech-language pathologists, and other therapeutic professionals, and to perform routine functions in support of rehabilitation. Includes instruction in roles and responsibilities of rehabilitation providers, basic function of the human body, disabling conditions, therapeutic skills, client management, and communication skills.

966 HEALTH ASSISTANTS Year 3 credits 10th 11th 12th

## CIP Code: 51.0899

Industry Certifications Available: Pennsylvania Nurse Aide Registry, Basic Life Support Health Care Providers, NOCTI Skills Testing Certification

A cluster program with a combination of subject matter and experiences designed to prepare individuals for entry-level employment in a minimum of three related health occupations under the supervision of a licensed healthcare professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, etc.

## 967 MEDICAL PROFESSIONS 3 credits 10th 11th 12th

CIP Code: 51.9999
Industry Certifications Available: To be determined, but may include the following: Basic Life Support (BLS), Pharmacy Technician (CPhT), EKG Technician (CET), Phlebotomy Technician (CPT), Nurse Technician (CNT), \& Pennsylvania Skills Certification

An instructional program that prepares individuals to apply knowledge and skills in the health occupations. Instruction is provided in the basic skills in a variety of areas associated with health occupations such as health and medical services, pharmaceutical and medical instruments and supplies. Instruction includes but is not limited to foundations of health (medical terminology); anatomy and physiology; legal, ethical and economic aspects of health care; clinical laboratory procedures; basic health occupational skills; aseptic techniques; OSHA regulations; and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.


## 969 HEATING, AIR CONDITIONING.\& REFRIGERATION Year 3 credits 10th 11th 12th

 CIP Code: 47.0201Industry Certifications Available: EPA 608 Technician Certification, NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA)
An instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions; overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems.


## 971 VETERINARY ASSISTANT 3 credits 10th 11th 12th CIP

## Code: 51.0808

Industry Certifications Available: To be determined, but may include the following: OSHA-10 Health Careers, CPR, Pet Tech First Aid, Purina Weight Coach, \& Pennsylvania Skills Certification

An instructional program that prepares individuals to support veterinarians by providing assistance during animal examinations, treatment administration and monitoring; by keeping animal and related health record information; and by performing a range of selected practice-related duties. This program is designed to provide instruction in preparing the animal for examination and treatment, sterilizing equipment and performing selected routine laboratory procedures under direct supervision of the veterinarian. Instruction also includes maintaining medical and business records, charting and scheduling activities and a wide range of practicerelated duties as applied to animal health care, the biomedical field and the pet industry. The health occupational planned courses include the study of life sciences with emphasis on animal anatomy, physiology, diseases, reproduction, genetics, nutrition, animal laboratory procedures, aseptic technique, OSHA regulations, infection control and procedures. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.
984 PUBLIC SAFETY $\quad$ Year 3 credits $\quad$ 10th 11th 12th

CIP Code: 51.0904
Industry Certifications Available: Emergency Medication Technician, National Incident Management System, Basic Life Support Health Care Providers \& Hazardous Materials Response Awareness

A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in prehospital settings and to supervise ambulance personnel. Students will learn about basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations. Students will also learn fundamentals of police operations and fire protection, as well as technical and vehicle rescue. Physical development and self-confidence are emphasized due to the nature of the specific occupation(s) associated with public safety.

970 WELDING $\quad$ Year 3 credits $\quad$ 10th 11th 12th

CIP Code: 48.0508
Industry Certifications Available: NOCTI Skills Testing Certification, American Welding Society Certification (forthcoming)

An instructional program that prepares individuals to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders and chemical baths for surface cleaning; positioning and clamping; and welding standards established by the American Welding Society, American Society of Mechanical Engineers and American Bureau of Ships.



## MON VALLEY SCHOOL VOCATIONAL-TECHNICAL TRAINING

Students attending Mon Valley School for vocational-technical training maintain their identity with Clairton High School where they receive their academic training, participate in school activities and receive their high school diploma. Three hours of each school day are spent at Mon Valley and transportation is provided. Information sheets outlining the entrance requirements and available programs are available from the Guidance Office.

992 EMPLOYMENT ORIENTED HOME ECONOMICS(NURSES' AIDE)


## 993 COMPUTER SCIENCE



## 994 AUTO MECHANICS



996 BUILDING \& GROUNDS


997 FOOD SERVICE


998 INDUSTRIAL PRODUCTS MAINTENANCE


999 MATERIALS HANDLING


