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9<sup>th</sup> - 12<sup>th</sup> GRADE ACADEMIC HANDBOOK

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**Steel Valley Senior High School**

2023 - 2024

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## ABOUT THIS HANDBOOK

The material contained in this handbook has been prepared to inform parents and students of the offerings at Steel Valley High School. Parents are urged to consult with principals and counselors concerning any point that is not made clear. Classes offered and credit amounts may be modified once a master schedule and daily period schedule have been developed.

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## **DISCLAIMER**

Most course selections listed in the handbook meet once per day, five days per week unless specifically noted otherwise. However, the school district reserves the right to add or remove courses as needed. The district also has the ability to reduce or extend the number of periods per week / year during the master scheduling process that may differ from the course description.

## **ACCREDITATION**

The high school program provided for grades 9 through 12 has been approved by the Pennsylvania Department of Education. Steel Valley High School is accredited by the Middle States Association of Colleges and Secondary Schools.

### **BOARD OF SCHOOL DIRECTORS**

JAMES BULGER, *President*

DANIEL ROJTAS, *Vice President*

MAYA ADAMS

JAQUAY CARTER

DAVID COLASANTE

ROBYN GUY

CARA KARSTETTER

WILLIAM MCLAUGHLIN

MARY YUHAS

### **CENTRAL OFFICE**

EDWARD WEHRER, *Superintendent*

BRYAN MACUGA, *Ast. Superintendent*

RENEE KOZUSKO, *Dir. of Pupil Personnel/Special Services*

### **SENIOR HIGH**

JOHN STROM, *High School Principal*

SHAWN MCCALLISTER, *Athletics/Activities Director*

JASON NOVAK, *Guidance*

CASEY WALKER, *Guidance*

ALYSSA BRACK, *High School Secretary*

AMY LYONS, *Athletics/Activities Secretary*

## **MESSAGE FROM THE HIGH SCHOOL ADMINISTRATION**

As we begin to plan for the next school year, you will find some changes to this course selection guide. All course descriptors have been reviewed to provide you and your student with the most information in order to make the best decision for your student's academic success.

At Steel Valley High School, the goal of our faculty and staff is to provide your student with the skills to be college and career ready upon graduation. This may look different for everyone, and it is important to have conversations about interests and post-secondary options and then base course selections on those conversations. As always, administration and your child's guidance counselor are here to assist in the selection process. Our teachers are also a valuable source of knowledge and can aid as well.

Please know that pre-requisites are placed on courses where the rigor of the material is at an accelerated level, or a prior knowledge base is required for students to be successful. Pre-requisites may also include data that is given to the district based on benchmarking assessments or other forms of assessment. Please know that we always have your student's academic growth and success foremost in our placement process.

We are excited to begin the process of another successful and rewarding school year.

John Strom  
Principal

## MESSAGE FROM THE OFFICE OF THE ATHLETICS / ACTIVITIES DIRECTOR

The following will provide you with important information about NCAA Division I and II initial eligibility standards for athletic participation. This information is critical if your son/daughter plans on participating in college athletics at a Division I or II institution. You may obtain a copy of the NCAA Guide for the College Bound Student Athlete from your son's/daughter's guidance counselor or by contacting the NCAA. This guide provides summaries of various NCAA rules and offers guidance on many topics that are important for you to know. The NCAA Initial Eligibility Clearinghouse Information (i.e. brochure and student release form) is also available from your son's/daughter's guidance counselor.

Please feel free to contact the guidance office if you have questions about any of this information. Also, feel free to contact the NCAA legislative services staff or the clearinghouse if you need additional assistance.

Shawn McCallister  
Athletics / Activities Director



NCAA legislative services staff or the clearinghouse:

NCAA Initial Eligibility Clearinghouse  
P. O. Box 7110  
Indianapolis, IN 46207  
Customer Service Line – (877) 262-1492

OR CONTACT THEM ON THE WEB AT:  
[https://web1.ncaa.org/eligibilitycenter/general/index\\_general.html](https://web1.ncaa.org/eligibilitycenter/general/index_general.html)



NCAA Eligibility Center Website and Services

NCAA Eligibility Center  
P.O. Box 7136  
Indianapolis, IN 46207

**Note: Home schooled students should not send paperwork to the P.O. Box. Please send information to the overnight mailing address.**

NCAA Eligibility Center  
1802 Alonzo Watford Sr. Drive,  
Indianapolis, IN 46202

Toll-free phone number (U.S. callers) - Customer service line - 877/262-1492  
Fax number: 317/968-5100

The Steel Valley School District is an equal opportunity education institution and will not discriminate on the basis of race, color, national origin, sex, handicap or limited English proficiency in its activities, programs or employment practices as required by Title VI, Title IX and Section 504.

For information regarding civil rights or grievance procedures or information regarding services, activities and facilities that are accessible and usable by handicapped persons, contact Mrs. Diana Borges, Supervisor of Special Education, at Steel Valley School District, 220 East Oliver RD, Munhall, PA 15120 (412) 464-3600 x1905.

***NOTE: The Administration will attempt to include every course in the schedule that is listed in this book. However, if the demand for a course exceeds available space or if the demand is too limited, students may be asked to make an alternate choice.***

## GENERAL INFORMATION

### COUNSELING SERVICES IN SELECTION OF COURSES

Parents may contact Mr. Novak by phone (412-464-3600 X 2521) to discuss course selections or to arrange an appointment.

### SPECIAL EDUCATION SERVICES

A full continuum of special education services is available at Steel Valley High School. Students that meet the eligibility criteria and need specially designed instruction may receive academic or emotional support from the Steel Valley Special Educational staff. Related services such as speech and language, occupational therapy, physical therapy, vision, and hearing services are also provided to those students with an identified need. Steel Valley provides Transition Planning for identified students at age 14.

### SCHEDULE LOAD REQUIREMENTS

Our curriculum provides for courses of study designed from our class listings and core subjects to prepare students for post-secondary education, business or the world of work.

Since college entrance requirements vary from one college to another, it is recommended that the college bound student select courses that will meet the requirements of the most demanding college.

- There must be an integrated and meaningful course sequence that yields intellectual development and academic success upon its completion.
- The courses necessary to ensure that students acquire the basic knowledge, skills and attitudes they need to enter the job market or pursue higher education are required of all.
- The curriculum must be organized so that all students take advantage of the learning opportunities available, not just to meet minimum state and local graduation requirements.

In each year of high school, students should carry subjects totaling at least 7 credits. No student will be scheduled for more than 3 study hall periods per week.

A work release may be granted during the senior year at the discretion of the building principal. Only those students who are on track for graduation will be considered. Written approval from both the parent/guardian **and** the employer are required for consideration.

### DETERMINING QPA

The Quality Point Average is computed by dividing quality points by credit hours. Consider this example:

	Course	Credit Hours	Grade	Formula	Qual pts
<i>Note: Honors Credit</i>	Honors English	1.0	A	1 x 4.5	4.5
	Algebra 1	1.0	B	1x 3	3.0
<i>Note: AP/CHS Credit</i>	AP Chemistry	1.5	B	1.5 x 4	6.0
	World Cultures	1.0	D	1 x 1	1.0
	Spanish 1	1.0	C	1 x 2	2.0
	Computers	1.0	E	1 x 0	0.0
	Phys. Ed.	0.5	B	0.5 x 3	1.5
	Totals	7.0			18
	QPA = Quality.Pts/Credit.Hrs = 18.0 ÷ 7.0 = 2.571				

Honors courses are awarded an additional half quality point for A's, B's, and C's, i.e., 4.5, 3.5, 2.5 AP courses receive an additional quality point for A's, B's, and C's, i.e., 5, 4, 3.

Courses designated Honors and AP/CHS address material at an accelerated pace, involve more in-depth research and discussion, and may include extensive coursework completed during the preceding summer. Pass/fail credits count toward meeting the graduation requirement but are not included in the QPA computation.

### HONOR ROLL

An honor roll is compiled at the end of each nine-weeks period. Students may qualify for Honor Roll as follows:

There must be no grades of D, E, or I (incomplete)

Honor Roll status is determined by the QPA for that 9 weeks:

Honor Roll	3.25 - 3.74
High Honor Roll	3.75 - 3.99
Highest Honors with Distinction	4.00 or higher

## GRADE LEVELS

Determined by the total credits completed successfully.

- Grade 10 — 7.0 credits
- Grade 11 — 14.0 credits
- Grade 12 — 21.0 credits

## Graduation Requirements

Graduation from Steel Valley High School will be determined by the credits earned in Grades 9, 10, 11, and 12. The minimum amount of credits will be required as the table below dictates. These are to be earned as follows:

### GRADUATION REQUIREMENTS CLASSES OF 2019 - 2022

A total of 28 credits must be earned. Credits are recommended to be distributed as shown below.

<i>Steel Valley High School</i>		<i>Steel Center Career Technical Center</i>	
*English (includes graduation project)	4.00 Cr	*English (includes graduation project)	4.00 Cr
*Social Studies	4.00 Cr	*Social Studies	4.00 Cr
*Mathematics	4.00 Cr	*Mathematics	4.00 Cr
*Science	4.00 Cr	*Science	4.00 Cr
*Physical Education	2.00 Cr	*Physical Education	2.00 Cr
*Health	0.50 Cr	*Health	0.50 Cr
Specific Tech & Info Science	2.00 Cr	Electives	0.50 Cr
World Lang/Arts/Humanities	2.00 Cr	* Steel Center Vo-Tech	9.00 Cr
Electives	5.50 Cr		
<b>Minimum Credits needed for graduation</b>	<b>28.00 Cr</b>	<b>Minimum Credits needed for graduation</b>	<b>28.00 Cr</b>

\* Courses required for Graduation

\*\* A minimum of 30 hours of community service must be on record for each senior as well.

Students who are attending Steel Center AVTS may be issued credit for Tech-PE or additional course/electives if class time is needed for another graduation requirement.

Students of the Steel Valley High School are required by the district as well as the state to complete a senior project in order to graduate. The Graduation Project of the Steel Valley School District meets the standards set forth by Pennsylvania's Chapter 4 curriculum requirements in accordance with the Chapter 339 plan.

College bound student athletes who wish to participate in athletics in college must complete a core curriculum that includes 14 academic courses to meet NCAA Clearinghouse Eligibility. The requirements differ slightly for Divisions I, II, and III. There is a grade point average requirement and an SAT or ACT test minimum score requirement; check with your counselor.

## CLASS RANK

Class Rank is determined at the end of each 9-week grading period. However, student graduation speakers are determined by a class rank computed at the end of the third quarter in their senior year. A student's cumulative quality point average is computed based upon all grades issued in all courses taken from grades 9 through 12. A class rank is constructed by arranging the students from top to bottom in order of their quality point averages. All ties are resolved by assigning the same class rank to all students tied with the same quality point average.

## STEEL CENTER CAREER TECHNICAL CENTER

Once enrolled into the Steel Center Career Technical Center program, no student may withdraw without the approval of the building principal.

## CREDIT RECOVERY

Counselors and administrators monitor student progress on an ongoing basis. A student who is unresponsive in the traditional school setting may enroll in a credit recovery program. The location could be off campus or on-line instruction and will take place during the summer months.

## OFF SITE COURSES

No more than **one** course from an **accredited** program hosted off site during the academic year may be taken for credit **and** must be approved by the building principal in advance. Pending school board approval, select College in High School programs may be available. If approved, students are responsible for any associated tuition costs should they opt for college credit.

## INCOMPLETE GRADES

Students may be assigned a **temporary** grade of Incomplete (I) at the discretion of the classroom teacher. After ten school days, teachers adjust Incomplete (I) grades to reflect any make-up work. In the event that no make-up work is completed, Incomplete (I) grades are automatically converted to failures (E). *No exceptions are made without the principal's permission.*

A student returning to school following an absence(s) must make up assignments/tests with the teachers immediately. It is the student's responsibility to contact the teacher to arrange make-ups. Failure to do so will be recorded as a "0." An incomplete during the final grading period must be completed by the last day of school or the grade in question becomes a failing mark. A long-term illness is treated separately. The teacher and administration shall review any unusual incomplete grade which affects passing or failing of a subject for the year. Seniors are not permitted to graduate with incomplete grades appearing on their secondary record.

**Any course dropped after the designated deadline date for schedule changes will result in a grade of "E" on his/her transcript. Schedules will not be changed to arrange for a student to have a specific teacher for any course or to reject a specific teacher.**

## COLLEGE IN HIGH SCHOOL

These classes are classes taken during the regular school day taught by our teachers. College credit is earned through successful completion of the pre-approved course. A fee is required by the college to receive the credits. At this time Steel Valley has partnered with the University of Pittsburgh. For example, Pitt's cost last year was approximately \$225.

### Current Classes Approved:

AP/College in High School	Calculus
AP/College in High School	Chemistry
AP/College in High School	Probability and Statistics
AP/College in High School	Physics C Mechanics
AP/College in High School	Biology
College in High School	Communication and Rhetoric
College in High School	Psychology
College in High School	Introduction to Film

## REPORT OF PUPIL PROGRESS

A student who has not met the requirements for graduation will not be issued a cap and gown; he/she will not participate in commencement. No diplomas will be issued until all state and local requirements are met.

Report cards are issued every nine weeks. A progress report will be sent at the midpoint of each grading period. Students and parents can check classroom assignments online using Sapphire. You can obtain your activation code for Sapphire from the technical department.

***Teachers will make every attempt to update their Sapphire pages weekly.***

## GRADING POLICY

The following scale will be used:

90 - 100	= A
80 - < 90	= B
70 - < 80	= C
60 - < 70	= D
< 60	= E

Final averages are determined by combining the percentages in each quarter, not the associated letter grade. The teacher will explain to the students the point system being used for each evaluation, quiz, homework, test, etc. so that a student is aware, at any time during the grading period, where he/she stands. Students are also encouraged to follow their progress through the Sapphire portal.

## PREREQUISITES

Prerequisites describe a certain level of knowledge to be successful in each course. In order to meet the high educational rigorous demands of advanced courses, prerequisites will be closely followed. **Most Academic, Honors and AP/CHS courses may require teacher recommendation and/or certain prior grade requirements**

## **STUDENT SCHEDULES**

Before the end of the school year, or during the month of June, students will receive a list of their courses scheduled for the upcoming year. Please notify the High School as soon as possible if there is a course(s) that has been omitted or if a course(s) was added by mistake. Since teacher recommendations may not be received until mid-summer, student schedules are subject to change due to not meeting prerequisites.

## **FULL YEAR COURSES**

After school starts, course changes for year-long courses will only be made within the **first 2 weeks** of the first report period for students experiencing academic difficulty.

## **SEMESTER COURSES**

Semester course change requests for both the first and second semesters must be made within the **first 2 weeks** of each semester for students experiencing academic difficulty.

**Because of these deadlines, it is very important that the student, parent and counselor examine schedules closely so changes are not necessary. Scheduling of a course is a commitment for the entire school year. Please make your course selections carefully. There will be NO schedule changes after the 2-week period**

*The Steel Valley High School's Guidance Department reserves the right to change students' schedules based on aptitude and prerequisites for the purpose of individual student achievement. The Guidance office will make students aware of the situation as changes are made; be assured this will only be done with the student's best interest in mind. The goal of the Guidance Department is for every child to achieve academically and develop intellectually to his/her fullest ability.*

**Classes offered and credit amounts may be modified once a master schedule and daily period schedule have been developed.**

- ***The Administration reserves the right to adjust a student's schedule for any reason.***



# Language Arts Department

## Course Offerings

Grade 9	Grade 10	Grade 11	Grade 12
<b>English 9</b>	<b>English 10</b>	<b>English 11</b>	<b>English 12</b>
<b>Academic English 9</b>	<b>Academic English 10</b>	<b>Academic English 11</b>	<b>Academic English 12</b>
<b>*Honors English 9</b>	<b>*Honors English 10</b>	<b>*Honors English 11</b>	<b>*Honors English 12</b>

**All courses in the Language Arts Department have a prerequisite(s)**

**\* Courses will receive weighted credits according to their honors or CHS/AP designation**

## LANGUAGE ARTS

### **ENGLISH 9**

**Full year**

**Prerequisite- Completion of LA 8**

This course focuses on communication skills, following directions, group participation, in depth research, presenting a point of view, grammar and the writing process. This course provides students with a variety of reading strategies that will enable them to discern relevant information from fiction and non-fiction texts. Reading strategies including but not limited to active readers and responders, talking to the text, distinguishing fact from opinion, identifying author's purpose, and enhancing vocabulary skills will be emphasized throughout the class. The content of the class will vary depending on the individual needs of the student readers.

**Grade 9  
1.0 credit**

### **ACADEMIC ENGLISH 9**

**Full year**

**Prerequisite – Teacher recommendation and min A in LA 8 or B in Adv LA 8.**

This course extends the material in English 9 with emphasis on improving student writing, vocabulary, reading skills, oral presentations, communication skills, and PSSA review. Students complete several outside readings.

**Grade 9  
1.0 credit**

### **HONORS ENGLISH 9**

**Full year**

**Prerequisite - Teacher recommendation and a minimum B in Adv LA 8.**

This course is for students who have demonstrated outstanding achievement in grade 8 Language Arts. Students complete several summer readings and undertake an enriched reading and writing program. The focus is on improving grammar, composition, vocabulary, and oral presentations.

**Grade 9  
1.0 credit**

### **ENGLISH 10**

**Full year**

**Prerequisite - Successful completion of any English 9**

This course is designed to introduce students to the unique experiences that comprise American Literature. Students will examine poems, plays, short stories, books, and non-fiction from a myriad of American writers. Writing, grammar, vocabulary, reading skills, and oral presentation skills will be emphasized.

**Grade 10  
1.0 credit**

### **ACADEMIC ENGLISH 10**

**Full year**

**Prerequisite - Minimum B in Acad English 9 or C in Honors English 9**

This course covers the same material as English 10 with an increased emphasis on the writing process. Students develop multi-paragraph essays in connection with major readings.

**Grade 10  
1.0 credit**

### **HONORS ENGLISH 10**

**Full year**

**Prerequisite- Minimum B in Honors English 9 or A in Acad English 9**

Students will be challenged in their critical analysis of American Literature in this advanced course. In-class essays will be emphasized, in addition to other analytical and creative writing assignments, vocabulary, and oral presentation skills. Literary criticism will be introduced through the reading selections. Students must complete a summer reading and writing assignment prior to the start of the school year.

**Grade 10  
1.0 credit**

### **ENGLISH 11**

**Full year**

**Prerequisite - Successful completion of any English 10**

This course focuses on a survey of World Literature, highlighting writings representing all cultures. As they continue to develop their writing and vocabulary skills, students read examples of man's earliest attempts to explain his world through myths and folktales through the 20th century as he deals with the complex problems of the modern world.

**Grade 11  
1.0 credit**

**ACADEMIC ENGLISH 11****Full year****Prerequisite- Teacher recommendation and an A in English 10 or a minimum B in Acad English 10**

This course covers the same material as English 11 with an increased emphasis on improving writing and vocabulary skills in preparation for college. This college-preparatory course builds on material from Academic English 10.

**Grade 11****1.0 credit****HONORS ENGLISH 11****Full year****Prerequisite- Teacher recommendation and min B in Honors Eng 10 or A in Acad Eng 10**

This course builds on material from Honors English 10 and prepares students for the AP English course in grade 12. Students will hone critical and creative writing skills while exploring a wide variety of fiction, nonfiction, drama, and poetry. Students must complete a summer reading assignment prior to the start of the school year.

**Grade 11****1.0 credit****ENGLISH 12****Full year****Prerequisite - Successful completion of any English 11.**

This course focuses on a chronological survey of English Literature from the classics to examples of contemporary British and American writers. Students enhance vocabulary skills and improve writing skills by eliminating errors in usage and mechanics.

**Grade 12****1.0 credit****ACADEMIC ENGLISH 12****Full year****Prerequisite- Teacher recommendation and A in English 11 or B in Acad English 11**

This course extends the material in English 12 with several outside readings. Students who are college bound should select it. A research project incorporates all of the skills developed previously.

**Grade 12****1.0 credit****HONORS ENGLISH 12****Full year****Prerequisite- Teacher recommendation and minimum B in Honors 11 or A in Acad English 11**

This course builds on material from Honors English 11. Students will analyze and evaluate texts from the British literature canon and will utilize critical writing skills that will prepare them for postsecondary coursework. Students will hone their analytical and writing skills while exploring a wide variety of fiction, nonfiction, drama, and poetry. Students must complete an extensive summer reading, writing, and grammar assignment prior to the start of the school year.

**Grade 12****1.0 credit**

This course

# Social Studies Department

## Course Offerings

Grade 9	Grade 10	Grade 11	Grade 12
American Cultures	American Cultures II	World Cultures	Psychology/Economics
*AP History I	*AP History II	*Honors World Cultures	*CHS Psychology

**All courses in the Social Studies Department have a prerequisite(s)**

**\* Courses will receive weighted credits according to their honors or CHS/AP designation**

## SOCIAL STUDIES

### **AMERICAN CULTURES I**

**Full year**

**Prerequisite- Completion of Social Studies 8**

This course will examine the culture and history of the United States between 1783-1877.

The emphasis is on the Constitution of the United States, civics, the role of the federal government and rights of individuals and groups within the United States.

**Grade 9  
1.0 credit**

### **AMERICAN CULTURES II**

**Full year**

**Prerequisite - Successful completion of American Cultures I or AP U.S. History I**

This course is a continuation of the culture and history of the American people between 1878 – present. Students are also exposed to American foreign policy from the Twentieth Century to the present.

**Grade 10  
1.0 credit**

### **AP U.S. HISTORY I**

**Full year**

**Prerequisite - A in English and History AND Teacher recommendation**

This AP Honors level course is for students who have demonstrated outstanding academic achievement in History as well as reading and writing skills in the middle school. The course is an in-depth study of the cultures and history of the United States from the origins of our nation in 1607 until the end of the Reconstruction in 1877. The course requires extensive reading and many analytical writing assignments.

**Grade 9  
1.0 credit**

### **AP U.S. HISTORY II**

**Full year**

**Prerequisite - B in AP U.S. History I**

This AP Honors course is an in-depth examination of American history from the Reconstruction in 1877 to the 1990's. Students are exposed to college level reading and writing assignments and will have the opportunity to take the AP History examination at the end of the course.

**Grade 10  
1.0 credit**

### **WORLD CULTURES**

**Full year**

**Prerequisite - Successful completion of previous American Cultures II or AP U.S. History II**

This course studies the international community as it examines their basic social institutions and cultural contributions relative to geography, history, religion, government and economics.

**Grade 11  
1.0 credit**

### **HONORS WORLD CULTURES**

**Full year**

**Prerequisite – Teacher recommendation AND a B in AP U.S. History II or an A in American Cultures II or a B in CHS Psychology**

This course is a study of the international community including the United States, the Middle East, Africa, Japan, China, Europe, Asia, India, Latin America and Canada. Emphasis is placed on the past and present relationships among industrialized, emerging, and underdeveloped countries. Students analyze the institutions of family, government, economics, education, and religion.

**Grade 11-12  
1.0 credit**

### **PSYCHOLOGY/ECONOMICS**

**Full year**

**Prerequisite - Successful completion of any World Cultures.**

Psychology teaches students the facts and principles of human behavior. Topics include: The history of psychology; identity and personality; relating to others; sensation and perception; mental health; psychological disorders; psychotherapy; life cycle; understanding the brain; learning and memory improvement; emotions and self-realization. Economics provides a brief introduction to basic principles that lead the student to the issues that impact teenagers — their present and future financial well-being. Topics include: credit, the stock market, income tax, interest rates, car loans, résumés, career research, and marketing strategies.

**Grade 12  
1.0 credit**

**CHS PSYCHOLOGY**

**Full year**

**Grade 11-12**

**1.0 credit**

**Prerequisite – Teacher recommendation AND Minimum A in World Cultures or a B in Honors World Cultures**

This college level course serves as an introduction to Psychology and will enable the student to earn 3 college credits from the University of Pittsburgh. (Fee Required) The course content will provide the learner with a variety of subjects including: History of Psychology, research Methods, Bio-Psychology, Sensation & Perception, states of Consciousness, Learning, Cognition, Emotion & Motivation, Development, Personality, Psychological Disorders and Therapies.

# Mathematics Department

## Course Offerings

Grade 9	Grade 10	Grade 11	Grade 12
INTRO TO ALGEBRA	ALGEBRA 1	GEOMETRY	ACADEMIC ALGEBRA II
ALGEBRA 1	GEOMETRY	ACADEMIC GEOMETRY	ACADEMIC TRIGONOMETRY
*HONORS GEOMETRY	ACADEMIC GEOMETRY	ACADEMIC ALGEBRA II	ACADEMIC PRE-CALCULUS
	ACADEMIC ALGEBRA II	ACADEMIC TRIGONOMETRY	*AP / CHS PROBABILITY AND STATISTICS
	*HONORS ALGEBRA II	*HONORS PRE-CALC/TRIG	*AP/CHS CALCULUS
		*AP / CHS PROBABILITY AND STATISTICS	*CHS CALCULUS II
		*AP/CHS CALCULUS	STANDARDS BASED / INTEGRATED MATH
		STANDARDS BASED / INTEGRATED MATH	CONSUMER MATH

**All courses in the Mathematics Department have a prerequisite(s)**

**\* Courses will receive weighted credits according to their honors or CHS/AP designation**

## MATHEMATICS

### **INTRO TO ALGEBRA WITH LAB**

**Full year**

**Prerequisite –Successful completion of Grade 8 Math**

This course is designed to build and solidify foundational skills and conceptual understanding necessary to be successful in Algebra I. Units of study will include foundations of Algebra, operations with rational numbers and integers, ratio and proportionality, relationships with graphs, and expressions, equations and exponents.

**Grade 9-10  
1.5 credits**

### **ALGEBRA 1 WITH LAB**

**Full year**

**Prerequisite –Minimum 80% in Grade 8 Math or successful completion of Intro to Algebra**

Students will study operations with rational and irrational numbers and expressions, linear equations and inequalities, graphing and writing linear functions, laws of exponents, systems of equations, polynomials and factoring, radicals, quadratic equations, coordinate geometry as it applies to linear rates of change and the line of best fit, and data analysis. Students will study the standards and eligible content as provided by the Pennsylvania Department of Education in preparation for the Algebra I Keystone Exam they will take in May. Students will use the ALEKS computer program for part of their coursework.

**Grade 9-10  
1.5 credits**

### **HONORS GEOMETRY**

**Full year**

**Prerequisite - Teacher recommendation and an B in Grade 8 Algebra**

Fast paced, honors-level course designed for students who possess and have demonstrated a strong mathematical ability. This course introduces students to geometric terms, the tools of geometry, postulates, and theorems. Students apply this knowledge to solve problems and write proofs using deductive reasoning. Other topics include transformations, triangle relationships, circles, and perimeters, areas, and volumes of plane and 3-dimensional objects.

**Grade 9  
1.0 credit**

### **GEOMETRY**

**Full year**

**Prerequisite - Successful completion of Algebra 1**

This course provides a general, yet thorough introduction to the fundamentals of geometry. Students will study geometric properties, parallel and perpendicular lines, triangle relationships, similarity, polygons, measurement, perimeter, area, volume, surface area, Pythagorean Theorem, circle properties, and reasoning and proof.

**Grade 10-12  
1.0 credit**

### **ACADEMIC GEOMETRY**

**Full year**

**Prerequisite - Minimum C in Algebra I**

This course introduces students to geometric terms, definitions, postulates, and theorems. Students apply this knowledge to solve problems and write proofs. Other topics include parallel and perpendicular lines, triangle relationships, similarity, polygons, measurement, perimeter, area, volume, surface area, Pythagorean Theorem, and circle properties.

**Grade 10-11  
1.0 credit**

### **HONORS ALGEBRA II**

**Full year**

**Prerequisite - Minimum B in Honors Geometry 9 and Teacher recommendation**

Fast paced course designed for students who possess and have demonstrated a strong mathematical ability. Students will study equations, inequalities, linear functions, linear systems and matrices, quadratic functions and factoring, polynomials, rational exponents, radical functions, exponential and logarithmic functions, and sequences and series. Probability and data analysis topics are interwoven. Graphing calculators or similar iPad applications are used to empower students to connect symbolic representation with concrete examples. Technology exercises are used to help students explore and visualize concepts.

**Grade 10  
1.0 credit**



**ACADEMIC ALGEBRA II****Full year****Prerequisite - Minimum C in Academic Geometry**

The course improves the skills developed in Algebra 1. Students graph systems of linear equations, inequalities and second-degree equations. They simplify rational expressions and expressions containing radicals and complex numbers. Functions and relations are discussed. Scientific and graphing calculators, or similar iPad applications, are incorporated into the coursework.

**Grades 10-12  
1.0 credit****ACADEMIC TRIGONOMETRY****Full year****Prerequisite - Minimum C in Academic Algebra II**

This course introduces the six trigonometric functions and relates them to the right triangle and the unit circle. These functions are used in graphing, deriving identities and trig laws, solving equations, and working with complex numbers. They are also applied to physics problems, and in the areas of surveying, navigation, electronics and sound. Graphing calculators, or similar iPad applications, and computers are incorporated into this course.

**Grades 11-12  
1.0 credit****AP / CHS PROBABILITY AND STATISTICS****Full year****Prerequisite - Minimum A in Academic or B in Honors Algebra II AND Teacher recommendation**

This AP/CHS course (Pitt course number 0200) enables students to understand statistical material in economics, business, education, psychology, sociology, and medicine. The content includes graphical techniques, binomial distributions, normal distributions, discrete and continuous random variables, compilation and interpretation of numerical data, measures of central tendency and dispersions, and basic rules of probability and their applications. Applications include projects and computer analysis, and scientific calculators. To receive college credit, students may either take the AP Statistics Exam or participate in the College in High School program through the University of Pittsburgh.

**Grades 11-12  
1.0 credit****HONORS PRE-CALCULUS / TRIGONOMETRY WITH LAB****Full year****Prerequisite - Minimum B in Honors Algebra II AND Teacher recommendation**

This is a fast-paced course in which students will spend the first semester learning the essentials of Pre-Calculus including polynomial functions, exponential and logarithmic functions, conic sections, vectors, sequences and series, and probability and statistics. The second semester will focus on Trigonometry and introduces the six trigonometric functions and relates them to the right triangle and the unit circle. These functions are used in graphing, deriving identities and trig laws, solving equations, and working with complex numbers. They are also applied to physics problems, and in the areas of surveying, navigation, electronics and sound. This course is necessary for the study of calculus in the senior year. All topics are aided by the use of a graphing calculator or similar iPad applications.

**Grade 11-12  
1.5 credits****ACADEMIC PRE-CALCULUS****Full year****Prerequisite - Minimum C in Academic Algebra II or Academic Trigonometry**

This course is designed to lay the groundwork for further study of mathematics at the college level. Students learn all the essentials of Pre Calculus including graph analysis and polynomial, rational, exponential and logarithmic functions. These functions are used in graphing, deriving identities and trig laws, solving equations, and working with complex numbers. The graphics calculator, computer or similar iPad applications are used as aids. A variety of real-world applications are included in the course.

**Grade 12  
1.0 credit****AP/CHS CALCULUS WITH LAB****Full Year****Prerequisite- Minimum B in Honors Trig/Pre-Calculus AND Teacher recommendation**

This AP/CHS course (Pitt course number 0220) focuses on limits, continuity, differentiation, and integration. Additional emphasis is placed on applications of derivatives and integrals, as well as transcendental functions. A combination of algebraic, numerical, and graphical approaches incorporates extensive use of a graphing calculator or similar iPad applications. **However, no graphing calculators are permitted on assessments.** Students qualify to take the AB Calculus AP exam and are given the option of paying tuition to participate in the college in high school program, earning 4 University of Pittsburgh credits for the course. A placement test is required by the University of Pittsburgh to be eligible for the program. Minimum eligible score is 76. Cost for placement test is \$25.

**Grade 11-12  
1.5 credits**

**CHS CALCULUS II (ONLY OFFERED IF MULTIPLE STUDENTS ARE REGISTERED)**

**Grade 12  
1.0 credit**

**Full Year**

**Prerequisite– Minimum B in AP/CHS Calculus I AND Teacher recommendation**

This AP/CHS course (Pitt course number 0230) focuses on Integration Techniques, Vectors, Parametric Curves, Polar Curves, Sequences and Series, and Differential Equations. Although technology is used to reinforce concepts, no graphing calculators are permitted on assessments. Students qualify to take the BC Calculus AP exam and are given the option of paying tuition to participate in the college in high school program earning 4 University of Pittsburgh credits for the course.

**CONSUMER MATH**

**Grade 12  
1.0 credit**

**Full year**

**Prerequisite - Successful completion of Algebra 1**

For consumer and business use, this course covers personal checking, savings accounts, sales slips, taxes, wages, loans, insurance, stocks and bonds and reviews math skills with the aid of a calculator or a similar iPad application. Directed practice through carefully planned projects and a practice set provides the student opportunities in performing accounting tasks commonly found in business. Where possible, the personal aspects of accounting are stressed in addition to its vocational aspects.

**STANDARDS BASED / INTEGRATED MATH**

**Grade 11-12  
1.0 credit**

**Full year**

**Prerequisite - Successful completion of any Geometry**

This course is based on the standards and eligible content as provided by the Pennsylvania Department of Education. Students will study algebraic concepts, geometric concepts, data analysis and probability along with problem-solving and critical thinking. Scientific and graphing calculators, or similar iPad applications, will be incorporated into the coursework.

# Science Department

## Course Offerings

Grade 9	Grade 10	Grade 11	Grade 12
Applied Science	Biology	Academic Chemistry	Academic Chemistry
*Honors Biology	Academic Chemistry	*AP/CHS Chemistry	*AP/CHS Chemistry
	*Honors Chemistry 10	*AP/CHS Biology	*AP Biology
		Anatomy/Physiology	Anatomy/Physiology
		Physics I	Physics I
		Earth/Space	Earth/Space
		*Honors Astronomy	*Honors Astronomy
			*AP/CHS Physics

**All courses in the Science Department have a prerequisite(s)**

**\* Courses will receive weighted credits according to their honors or CHS/AP designation**

## SCIENCE

### **APPLIED SCIENCE**

**Full year** **Grade 9**  
**1.5 credits**

**Prerequisite- Completion of Science 8**

This introductory-level course gives students an awareness of the principles of biology. Students will study basic biological concepts and the mathematics of science (including conversions and graphing). *Laboratory exercises are utilized to emphasize important concepts.*

### **HONORS BIOLOGY 9**

**Full Year** **Grade 9**  
**1.5 credits**

**Prerequisite – Minimum B in Advanced ELA 8 AND minimum B in Grade 8 Algebra AND minimum A in Grade 8 Science**

This college preparatory course is content and vocabulary intensive. Units in ecology, biochemistry, cell biology, genetics, and evolution are covered throughout the year. Students will complete numerous labs and projects that enhance learning. In addition to the provided reading material, students will read and evaluate text from journal articles, newspapers, and other sources. Students enrolled in the course are expected to complete the Biology Keystone examination at the end of the year.

### **HONORS CHEMISTRY**

**Full year** **Grade 10**  
**1.5 credits**

**Prerequisite – Minimum B in Honors Biology 9 or Minimum A in Biology AND Teacher recommendation**

In this course the students study the atomic structure, chemical composition and reactions of matter. Hands-on experiences are provided to the student through a laboratory program. This course is a prerequisite for AP Chemistry.

### **AP/CHS CHEMISTRY**

**Full year** **Grades 11- 12**  
**1.5 credits**

**Prerequisite - Minimum QPA of 3.75 AND minimum B in Honors Chemistry AND Teacher recommendation**

This Advanced Placement course continues the study of Honors Chemistry with a more rigorous examination of the topics studied. CHS is designed to be the equivalent of 4 credits of college-level chemistry. Students who complete AP Chemistry are encouraged to take the AP Exam. Recommended for students planning a career in medicine, dentistry, pharmacy, or chemical engineering. A complete laboratory program is provided.

### **ANATOMY AND PHYSIOLOGY**

**Full year** **Grades 11- 12**  
**1.0 credit**

**Prerequisite - Minimum C in any Biology AND Chemistry**

This course involves a detailed study of the systems of the human body. Laboratory activities incorporate various dissections. It is recommended for students planning to enter the health professions or those with a high interest.

### **ACADEMIC CHEMISTRY**

**Full year** **Grades 10-12**  
**1.5 credits**

**Prerequisite- Minimum QPA of 2.5 or C in any Biology AND Algebra 1**

This Chemistry course is designed to provide students with an opportunity to develop and evaluate basic ideas and theories related to chemistry. Students are required to apply skills and knowledge to chemistry principles in order to explain various concepts, solve problems, and complete laboratory experiments.

### **BIOLOGY**

**Full year** **Grades 10-11**  
**1.5 credit**

**Prerequisite - Successful completion of Applied Science**

This is a survey course covering all major areas of biology. It is designed to give the student a practical background in the life sciences. Selected laboratory exercises are utilized to emphasize important concepts.

**AP/CHS BIOLOGY****Full year****Prerequisite- Minimum B in Honors Chemistry, or A in Academic Chemistry AND Teacher recommendation**

This rigorous course is designed to be the equivalent of 8 credits of college-level biology. Topics include biochemistry, molecular biology, genetics, evolution, microbiology, zoology, anatomy and physiology, ecology, and population genetics. There are several advanced laboratory exercises that will be completed to enhance student learning. Students who complete this course are encouraged to take the AP examination at the end of the year. Students enrolled in the course have the option to earn college credit through the College in High School program at the University of Pittsburgh. This option requires the payment of tuition at a discounted rate.

**Grades 11-12  
1.5 credits****EARTH/SPACE****Full year****Prerequisite - Successful completion of Biology**

Students study issues in Nature of Science, meteorology, oceanography, geology, the exploration of space, the earth-moon system, life and the creation of the universe. Activities include hands-on laboratory investigations, relevant videos, and extensive use of school planetarium.

**Grades 11-12  
1.0 credit****HONORS ASTRONOMY****Full year****Prerequisite - Successful completion of any Chemistry or Teacher recommendation**

Topics include quantitative in-depth study and investigations of the origins of astronomy, creation of the universe, star, sun and sky cycles, the planets and their motions, black holes and string theory. Activities include laboratory investigations, hands-on in-class experiences, out of class experiences, films, and extensive use of the school's planetarium.

**Grades 11-12  
1.0 credit****PHYSICS 1****Full year****Prerequisite - Minimum QPA of 2.5 or C in any Chemistry**

This laboratory-based course focuses on the interactions of matter and energy in the physical world as it develops students' skills in problem solving, critical thinking, and data analysis. Major topics include 1-D and 2-D motion and mechanical forces, work energy, impulse + momentum, rotational motion, and sound waves. Electromagnetism, light, and nuclear processes may also be introduced.

**Grades 11-12  
1.5 credits****AP/CHS PHYSICS C MECHANICS****Full year****Prerequisite - A minimum of a B in Physics I or concurrent enrollment in Calculus I**

This AP course is an introductory college physics course intended for science and engineering majors. The goal of this course is to learn physics and to develop the skills of critical thinking and problem solving. Students will learn the principles of Newtonian mechanics, energy, collisions, rotational mechanics, gravitation, waves, and the kinetic theory of gases. Calculus topics are introduced and applied where needed. Students will be prepared to take the AP Physics C exam. Students who have completed or are concurrently enrolled in Calculus I will have the option of paying tuition to participate in the College in the High School program earning four college credits for the course.

**Grade 12  
1.5 credits**

# Elective Course Offerings

**\*Students have the option of choosing any elective provided any prerequisite is met**

## LANGUAGE ARTS ELECTIVES

### **ACADEMIC LITERACY (Elective Credit ONLY)**

**Semester** **Grade 10**

**Prerequisite- 10<sup>th</sup> Grade Status**

This course is designed to help students foster a love of reading and language acquisition that will strengthen both their critical thinking and content skills. Students will read for pleasure, improve their vocabulary, study Greek and Latin roots, learn to summarize and draw conclusions, and explore the use and impact of figurative language. *All 10<sup>th</sup> grade students are required to take this course unless you are concurrently enrolled in Honors English 10.*

### **\*CHS COMMUNICATION and RHETORIC (Elective ONLY)**

**Full year** **Grades 11-12**

**Prerequisite- Minimum B in Honors or A in Academic English AND Teacher recommendation**

This introductory course examines the fundamentals of argument and prepares students for proficiency in the application of these elementary debating techniques. There are two main units in this course. The first unit examines the foundations of argument construction, support, and refutation. The second unit develops argument skills through in-class debates. There is a written as well as oral component to this course. Students taking this course have the option to pay tuition to participate in the College in High School program with the University of Pittsburgh and will receive 3 Pitt credits for the course. This is a writing-intensive course.

**\* Course will receive weighted credits according to their honors or CHS/AP designation**

### **PUBLIC SPEAKING (Elective ONLY)**

**Semester** **Grades 9-12**

**Prerequisite- None**

Students are introduced to public speaking as an important component of their academic, work, and social lives. Students will participate formally and informally in small and large group discussions pertaining to literary analysis and informational and persuasive topics. They will give formal presentations individually or in groups in order to engage in peer-to-peer learning. Students will develop discussion leadership skills, identify propaganda techniques, and research a variety of topics. During presentations, students will use proper volume, stance, eye contact, and articulation abilities. Students will study how to incorporate well-designed visual and multimedia aids in presentations and how to maintain a credible presence in the digital world. Students also learn about the ethics of public speaking and about techniques for managing communication anxiety.

### **CREATIVE WRITING (Elective ONLY)**

**Semester** **Grades 9-12**

**Prerequisite- None**

In this course, students write personal narratives based on their own experience and short fiction drawn from their imaginations. Characterization, point of view, suspense, foreshadowing, symbolism, description, dialogue, and other narrative techniques are practiced. Opportunities will be provided for students to write poetry, essays, technical writing, short plays/screenplays, fables, fairytales, short stories, and song lyrics.

**CREATIVE WRITING II (Elective ONLY)****Grades 11-12****Semester****0.5 credits****Prerequisite- Creative Writing I**

In Creative Writing II, students will expand the skills learned in Creative Writing I in various formats of the students choosing. Students will explore themes and concepts with the objective of expanding them into a short story, a poem, a song, or a screenplay. Students will be exploring the use of various tools to broaden their skill set. Students will be expected to write pieces that demonstrate the importance of historical context, social influences, topical issues, and alternative points of view. Students will be journaling daily with the expectation that they will be able to use their journal as a repository for ideas about what to write and how to write it. Students will be permitted choice of product but are expected to produce at least one example of each type of writing. Students will build a portfolio of polished work by the end of the course.

**SAT/ACT PREPARATION (Elective ONLY)****Grades 11-12****Semester****0.5 credits****Prerequisite – None**

Students will be provided with SAT/ACT practice questions and test-taking strategies in order to help them prepare for those tests. The verbal preparation focuses on vocabulary building, contextual reading skills for the sentence completion and reading comprehension sections of the exam, analogy types and techniques, roots and prefixes, reading attack skills, and writing skills. Practice and test-strategy skills will focus on multiple-choice and quantitative comparison questions.

**CHS INTRODUCTION TO FILM (Elective ONLY)****Grades 11-12****Full Year****1.0 credit****Prerequisite – Minimum B in Honors or A in Academic English AND Teacher recommendation**

This course in visual arts offers students a broad introduction to the medium of film while inviting conversations about new media, television, and film's connection to other arts, including photography, painting, theater, and web video.

\* Course will receive weighted credits according to their honors or CHS/AP designation

## MATHEMATICS ELECTIVES

**STATISTICS THROUGH SPORTS (Elective ONLY)****Grades 11-12****Semester****0.5 credits****Prerequisite- None**

This course is designed to be an introduction into the use of statistics in sports. On various different levels, statistics are used in sports to evaluate player performance, build teams, and generate revenue. The topics discussed will allow students to gain a better understanding of how to calculate basic sports statistics and evaluate player performance. Calculating a team's chances of winning, the best player available for a team to draft, or how a change in game theory affects a team's chances are some of the basic applications. More advanced evaluation tools such as advanced metrics and multiple regressions will also be discussed in the course.

## SCIENCE ELECTIVES

**FORENSIC SCIENCE (Elective ONLY)****Grades 11-12****Semester****0.5 credits****Prerequisite - Minimum C in any Biology AND Chemistry**

Forensic science is the study and application of science as it pertains to law. This course is intended to introduce the background and philosophy of analyzing physical evidence that can be found at a crime scene. Topics to be covered include, but are not limited to, physical properties of glass, hairs/fibers, serology, fingerprinting, toxicology and document analysis.

## WORLD LANGUAGE

### **FRENCH 1**

**Full year**

**Prerequisite - None**

Students comprehend and produce simple, short sentences and ideas using memorized words and phrases. They interact with each other in role-playing situations they might encounter in life. Basic communicative tasks are facilitated by memorized patterns. Reading comprehension is enhanced by repeating, reading aloud, reciting and writing simple sentences. Students learn to recognize and compare people, culture, products and viewpoints with their own. Students are introduced to ways in which French is connected to the native language, to other disciplines and to resources beyond the classroom.

**Grades 9-12**

**1.0 credit**

### **FRENCH 2**

**Full year**

**Prerequisite - French 1, minimum C grade**

This is a continuation of the first level with reinforcement and enrichment of vocabulary, grammar and culture. Students study more complex ideas and become more aware of similarities and differences between French and native language and cultures. They continue to use informational skills common to French that could be transferred to other disciplines.

**Grades 10-12**

**1.0 credit**

### **FRENCH 3**

**Full year**

**Prerequisite - French 2, minimum C grade**

The level 3 course is designed to consolidate the foundation established in Levels 1 and 2 and to expand the student's knowledge of how French functions. Students will expand on reading, writing, speaking and listening (skills) using past, present and future tenses. Level 3 students discuss, analyze, compare and explain various cultural aspects of French. Students will transfer information, skills and resources from French to other disciplines and vice versa. They are encouraged to seek opportunities to use or apply the target language outside the school environment.

**Grades 11-12**

**1.0 credit**

### **FRENCH 4**

**Full year**

**Prerequisite - French 3, minimum B grade**

A course consolidates the foundation established in levels 1, 2 and 3 and expands the student's knowledge of how the language functions. Concentration on reading, writing, speaking and listening using past, present, and future tenses is included. Students discuss, analyze, compare and explain various cultural aspects. Students exchange information, skills and resources with other disciplines. They are encouraged to seek opportunities to apply French outside the school environment. You will have the opportunity to receive college credit from Pitt after successful completion of this course.

**Grade 12**

**1.0 credit**

### **SPANISH 1**

**Full year**

**Prerequisite - None**

Students comprehend and produce simple, short sentences and ideas using memorized words and phrases. They interact with each other in role-playing situations they might encounter in life. Basic communicative tasks are facilitated by memorized patterns. Reading comprehension is enhanced by repeating, reading aloud, reciting and writing simple sentences. Students learn to recognize and compare people, culture, products and viewpoints with their own. Students are introduced to ways in which Spanish is connected to the native language, to other disciplines and to resources beyond the classroom.

**Grades 9-12**

**1.0 credit**

### **SPANISH 2**

**Full year**

**Prerequisite - Spanish 1, minimum C grade**

This is a continuation of the first level with reinforcement and enrichment of vocabulary, grammar and culture. Students study more complex ideas and become more aware of similarities and differences between Spanish and native language and cultures. They continue to use informational skills common to Spanish that could be transferred to other disciplines.

**Grades 10-12**

**1.0 credit**



**SPANISH 3****Full year****Prerequisite - Spanish 2, minimum C grade**

This level 3 course consolidates the foundation established in levels 1 and 2 and expands the student's knowledge of how the language functions. Concentration on reading, writing, speaking and listening using past, present, and future tenses is included. Students discuss, analyze, compare and explain various cultural aspects. Students exchange information, skills and resources with other disciplines. They are encouraged to seek opportunities to apply Spanish outside the school environment.

**Grades 11-12  
1.0 credit****SPANISH 4****Full year****Prerequisite - Spanish 3, minimum C grade**

The level 4 course in Spanish is designed to strengthen the ease and confidence with which the students use the target language for self-expression. Level 4 students initiate, sustain and bring to closure a wide variety of communicative tasks. Students will continue to refine skills of comprehension, analysis and interpretation in the target language. Students in level 4 will expand their knowledge of various aspects of the target cultures, apply, evaluate, explain and integrate this information. Students will be able to synthesize and apply information from target language resources to other disciplines and vice-versa.

**Grade 12  
1.0 credit****ARTS****ART 1****Semester****Prerequisite- None**

Art I is an introductory course designed to encourage an appreciation for the arts. Various mediums and techniques will be explored throughout this course, as well as artists and their work throughout history. Students will examine and apply the basic elements and principles of art and design to create their own original art.

**Grades 9-12  
0.5 credits****ART 2****Semester****Prerequisite - ART 1**

Art II explores the fundamentals of drawing and painting through a variety of two- and three-dimensional art projects. This course allows students to continue to develop their basic drawing and painting skills and a further appreciation for art by applying methods such as grid drawing, portrait drawing, shading techniques and perspective. Emphasis is placed on proper technique as well as creativity.

**Grades 9-12  
0.5 credits****ART 3****Semester****Prerequisite- ART 2**

Art 3 allows students to continue to build upon the foundational skills acquired in Art 1 and Art 2. Students will apply knowledge learned to challenge them further and begin to develop their own personal style of art. Students will be able to use wide variety of materials.

**Grades 10-12  
0.5 credits****ART 4****Semester****Prerequisite- ART 3**

Art 4 is developed for the serious art student who is interested in continuing to grow as an artist by exploring various techniques and mediums. This course will allow students to work more independently and create original works of art based upon their individual skills and interests. Students will begin to develop a portfolio of work to use for admission to a college or trade school.

**Grades 10-12  
0.5 credits****CERAMICS****Semester****Prerequisite - None**

Ceramics is designed to teach the fundamental hand building skills of clay construction. Projects consist of pinch pots, slab construction, coil pots and pieces made with drape mold techniques. Emphasis is placed on learning to recognize various stages of clay and which techniques are appropriate at each stage. Beyond sturdy construction, refinement tools and techniques will be employed.

**Grades 9-12  
0.5 credits**

## **ADVANCED CERAMICS**

**Semester**

**Prerequisite- C in Ceramics**

The Advanced Ceramics course is designed to engage serious art students in more advanced ceramic techniques and projects. Students will develop and enhance skills learned in previous Ceramics class, as well as refine and experiment with new techniques and tools. Upon completion of this course, students will be able to exhibit mastery of basic hand building and wheel-thrown techniques

**Grades 9-12  
0.5 credits**

## **MIXED MEDIA STUDIO ARTS**

**Semester**

**Prerequisite-None**

This course is designed to allow students the opportunity to not only produce art, but also learn real-world applications for art. There will be an emphasis on visual perception, problem solving, organization, decision-making, cooperation and a multitude of other life skills. Students will challenge themselves with a variety of mixed media materials that incorporate their creativity and individuality.

**Grades 9-12  
0.5 credits**

## **PERFORMING ARTS**

### **MUSIC PRODUCTION**

**Semester**

**Prerequisite – None**

*“Listen to the beat of your own heart. Then go out and make your own music!”  
- Unknown*

Today you can create record, mix and market your original compositions on your laptop or tablet. Whether you are a singer, music producer, audio engineer, songwriter, rapper, or just someone who appreciates good music, it is essential to understand the necessary technologies for music production.

This course is a hands-on introduction into music production, arming you with the tools you need to write, produce, and market your own music and the music of your peers. You may become one of Steel Valley High School’s top music engineers or producers. The artists you are looking to promote could be sitting right next to you in the cafeteria, or right behind you in your science class! Study the fundamental principles of producing and engineering music, learn about the music production process, including recording, editing, and mixing, and gain a greater understanding of the successful marketing techniques used in today’s music industry. Recording studio internships may be awarded to students who excel in this class.

**Grades 9-12  
0.5 credits**

*A commitment to the performing groups listed below means that all members are required to participate in all concerts, performances and extra rehearsals which take place outside of normal school hours. Failure to fulfill this requirement results in a reduction of grade and/or dismissal from the organization. Only excuses such as personal illness, death in the family, etc. are acceptable.*

### **CONCERT CHOIR**

**Full year**

**Prerequisite – None**

Concert choir is a performing group of mixed voices. This course is designed to develop the full range of the voice, establish good vocal technique and ear training, and promote music appreciation and musicality by performing both secular and sacred choral music from early periods of history through the rock era and music of the present day. Attendance at two evening performances is required, one in December and one in the spring. The Choir may appear at community events during the year.

**Grades 9-12  
1.0 credit**

### **HIGH SCHOOL BAND**

**Full year**

**Prerequisite – Successful completion of one year of MS/HS band and/or audition**

This course consists of a daily concert band rehearsal. Musical performance skills acquired in the middle school band are expanded and refined. Daily ensemble playing is designed to expose students to various styles of music and composers as well as degrees of technical difficulty. Attendance of all after school rehearsals and performances is mandatory. Music skills, discipline, personal responsibility, group cooperation and goal achievement, and self-confidence are emphasized.

**Grades 9-12  
1.0 credit**

## FAMILY CONSUMER SCIENCE

### **FAMILY/CONSUMER SCIENCE**

**Grades 9-12**

**Semester**

**0.5 credits**

**Prerequisite – None**

This course is designed to help students cope with the world around them and increase daily living skills. The course includes traditional teaching covering the topics of food safety, consumer economics, foods and nutrition, basic cooking skills, and the sustainable diet.

### **CHILD DEVELOPMENT**

**Grades 9-12**

**Semester**

**0.5 credits**

**Prerequisite - None**

This course is designed for students who are interested in learning about pregnancy, young children and their development. If you are considering a career which deals with children, this course provides an excellent background in current theories.

## TECHNICAL & INFORMATIONAL SCIENCE

### **GRAPHIC DESIGN**

**Grades 9-12**

**Semester**

**0.5 credits**

**Prerequisite- None**

Students will learn to use professional computer graphic software such as Photoshop to change or manipulate their favorite digital images, and Illustrator to design logos, vinyl stickers, posters, and visual concepts that will communicate ideas to inform, stimulate, and captivate people. Basic designing principles will be introduced that will help students create more appealing products that are used in the real world.

### **CODING AND APPLICATION DESIGN**

**Grades 9-12**

**Semester**

**0.5 credits**

**Prerequisite- None**

This course will teach students how to code and create apps using a programming language. The interactive, introductory course teaches the foundations of computer science using the Python language. Students will acquire the capabilities to create apps for the iPhone, iPad, Apple TV, Apple Watch, and Mac. Various platforms, tools, language, design, app frameworks, graphics and games, media, and accessories will be available for student use to assist them in the app creation process. This class will teach students how to think computationally and solve complex problems.

### **CAREER AND TECHNOLOGY**

**Grade 9**

**Semester**

**0.5 credits**

**Prerequisite– 9<sup>th</sup> Grade Status**

The focus of this course is to help students learn how to drive their careers, from accessing appropriate academic opportunities to packaging skills and talents in order to navigate the world of work. Students who take this class will gain a working knowledge of Microsoft Office, Google, and iOS applications. Students will complete career interest surveys, research colleges and careers, create resumes, and learn various other “soft skills” that will help in job acquisition. Students will complete four artifacts for their Chapter 339 Career & Technical Information Portfolio.

*All 9<sup>th</sup> grade students are required to take this course.*

### **3D DESIGN**

**Semester**

**Prerequisite- None**

In this course, students will use professional 3D design applications and 3D printers used by real-world designers to create custom 3D prints. They will learn and apply the elements of the design process which include brainstorming, sketching, using Tinkercad to create 3D digital drawings, creating prototypes, checking projects for accuracy, then creating final 3D prints of their products. Students will also learn how to read technical drawings, develop spatial reasoning, 3D thinking, measurement skills, and be involved in real-world problem solving.

**Grade 9-12**  
**0.5 credits**

### **ARCHITECTURAL DESIGN**

**Semester**

**Prerequisite- 3D Design**

Students will use a professional CAD application used by architects in the real world to create floor plans, 3D virtual models of residential structures, and digital presentations of their work. They will learn and apply the basics of architectural design, history of architecture, elements of design, and become familiar with famous architects and how their works impacted the field of architecture. Students will also have the opportunity to apply your creativity by designing their own custom home.

**Grades 9-12**  
**0.5 credits**

### **ROBOTICS**

**Semester**

**Prerequisite- None**

This entry-level course uses a hands-on approach to introduce the basic concepts of robotics and engineering with construction materials such as art and craft supplies. Students will learn the basic parts of a robot and how they function. While working in groups, learners will participate in problem solving activities to design, build, and program robots to do a variety of jobs with easy-to-use software environments. Robotics is an exciting field and will continue to provide many new challenges to designers and programmers who wish to pursue a career building robots that can perform a variety of tasks.

**Grades 9-12**  
**0.5 credits**

### **HOME MAINTENANCE**

**Semester**

**Prerequisite- None**

This course provides the basic knowledge of woodworking and home repairs. Students will design and produce a product that solves a household matter such as a home improvement project. Safety procedures will be practiced while learning certain home repairs. Some of the upkeeps included will be patching holes, fixing faucets, replacing plumbing, installing lights, replacing outlets, adding wall anchors, reading meters, replacing door knobs, and other potential common repairs. Students will demonstrate machine and tool safety as they expand their basic knowledge in, but not limited to: carpentry, masonry, plumbing, drywall finishing, electricity, soldering, patching, and painting.

**Grades 9-12**  
**0.5 credits**

### **ENTREPRENEURSHIP AND MARKETING**

**Semester**

**Prerequisite- None**

This academic/business course is designed for students who intend to study business in college, explore the possibility of owning/managing their own business, or want to gain an understanding of business operations. The course will provide a critical understanding of the following topics: Types of businesses (sole proprietorship, partnership, and corporation), business communication, motivation and leadership, ethics, human resources, conflict and stress. Activities and assessments will promote critical thinking and decision making, while addressing the importance of using technology effectively in business.

**Grades 9-12**  
**0.5 credits**

## HEALTH & PHYSICAL EDUCATION

### PHYSICAL EDUCATION

Semester/Rotational

Prerequisite - None

•• Graduation Requirement ••

All students are required to participate in physical education classes each year. Each course is devoted to physical fitness, team sports and lifetime sports. Some of these activities may be co-educational. This course may be scheduled daily for one semester or on a rotational basis at the discretion of the principal. *All students must pass four classes of PE (2 credits) in order to graduate.*

Grades 9-12  
0.5 credits

### HEALTH

Semester

Prerequisite - None

•• Graduation Requirement ••

Good health is a most desirable aspect of total living. Students are provided with accurate and up-to-date information concerning health and how it affects the individual, home, school and community. Emphasis is placed on the importance of practicing good health habits as a way of life. *Students must take this course at some point during grades 9-12.*

Grade 9-12  
0.5 credits

## MISCELLANEOUS

### COMMUNITY SERVICE

30 hours

•• Graduation Requirement •

Steel Valley's BLAST, our acronym for "Bringing Learning and Service Together," represents a partnership with community agencies. We engage students as resources to meet community needs and improve student learning by experiencing service learning activities.

Grades 9-12

### GIFTED PROGRAM

Prerequisite - Has a GIEP

Students eligible for the Gifted Program complete a variety of projects and explorations through enrollment in this course. It focuses both on in-depth study of selected topics and on more general explorations of compelling topics. To some extent topics identified for study in the gifted program are selected from a list of both teacher and student preferences.

Grades 9-12

### ONLINE COURSES

Online

Prerequisite - See course descriptions

Students may enroll in web-based courses offered online with written approval from the principal. They receive the associated credit toward Steel Valley's graduation requirements. Any course fees are the responsibility of the student. Please see the guidance counselor for a current list of course offerings.

Grades 9-12  
credit set by Administration

### WORK/CAREER OPTION

Full year

Prerequisite - The student's schedule must include at least 4 other courses

This is for students who wish to develop, through on-the-job training, skills that are immediately applicable in an occupation. Any senior who desires an abbreviated schedule for purposes of employment must select Work Release on the Course Selection Sheet. No requests are honored after the first two weeks of the school year. To be considered, a student must be on track for graduation and carry a schedule of five courses. Written approval from both the parent/guardian **and** the employer are required for consideration. The student and parent/guardian must assume full responsibility for securing employment and all issues relative to liabilities in the workplace. Students may not be tardy or absent from school to be eligible to report to work that same day. Any violation of this provision may result in removal from the program

Grades 12  
1.0 - 3.0 credits

## Steel Center for Career and Technical Education

Do you want to:

**Prepare yourself for the workforce and postsecondary education at the same time?**

**Earn college credit while in high school?**

**Earn valuable industry certifications that make you employable right out of high school?**

**Earn high school credit while working during the school day?**

**Work side by side with friends from other high schools?**

**Be a part of something extraordinary?**

**If so, then consider making Steel Center a part of your day!**

Students who attend Steel Center can gain a labor market advantage through active learning that meets the expectations of 21<sup>st</sup> 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](http://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, 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.

For information regarding services, activities, and facilities that are accessible by handicapped persons, contact the Director of Steel Center CTC at (412) 469-3200, extension 104.

Students attend a half day for lecture and laboratory work in the technology of their choice. Some of the course offerings require the student to purchase uniforms, safety shoes, tools, cosmetology kits, etc.

**Once accepted into the Steel Center CTC program no student may withdraw without the approval of the building principal and/or guidance counselor. Students granted permission to withdraw after nine weeks may receive partial credit for SCCTC and encounter limited choices among alternate courses. Summer school may be necessary to gain the credits needed to meet graduation requirement.**

With the principal's approval, vocational students may be awarded an additional credit for Tech Math or Tech Science if the following guidelines have been met:

1. The vocational student must have Tech Math or Tech Science declared as part of his/her schedule during the first nine weeks of enrollment at SCCTC. It may **not** be added after this initial term as a means of assisting students with credit recovery.
2. The vocational student may only opt for Tech Math and/or Tech Science credit one time during his/her tenure with SCCTC and may not opt for both during the same academic year. In this regard, students should be encouraged to complete Steel Valley math and science courses and only be encouraged to pursue SCCTC credit when excessive scheduling conflicts exist and/or such credit is supported by an IEP team.

**Prerequisite – Students must earn a 2.0 QPA and maintain a 92% attendance rate unless approved by administration.**



## **CAREER MAJORS (CIP CODES)**

Steel Center offers 18 career majors. Each major is based on state and/or locally 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 and college credit in their 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:

**Advertising & Design (Program of Study)**  
***CIP Code: 50.0402, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Adobe Certified Associate CS6 Photoshop, InDesign, Illustrator, Adobe Premier Pro & Pennsylvania Skills 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.

**Automotive Technology (Program of Study)**  
***CIP Code: 47.0604, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, Section 609 Certification for Refrigerant Recycling and Recovery & Pennsylvania Skills 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 drive train 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.

**Baking/Pastry Chef (Program of Study)**  
***CIP Code: 12.0501, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** ServSafe Manager Food Safety, ServSafe Food Handler, ServSafe Allergens, S/P2 Culinary Safety and Pollution Prevention, & Pennsylvania Skills 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 bake products; 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.

**Building Trades Maintenance (Program of Study)**  
***CIP Code: 46.0401, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Pennsylvania Builder's Association Certification (PBA), OSHA-10 Hour Training CareerSafe, Forklift-Classes 1,4, 5 & Pennsylvania Skills Certification

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.

**Carpentry (Program of Study)**  
***CIP Code: 46.0201, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Pennsylvania Builder's Association Certification (PBA), OSHA 10 Hour Training CareerSafe, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single Extension Ladder, Step Ladder, Stop the Bleed & Pennsylvania Skills Certification

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.

**Collision Repair and Refinishing (Program of Study)**  
***CIP Code: 47.0603, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** S/P2 Collision Safety and Pollution Prevention, & Pennsylvania Skills 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 primer and finish coat.

**Computer Technology (Program of Study)**  
***CIP Code: 15.1202, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** A+ Certification, Network+ Certification, & Pennsylvania Skills 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.

**Cosmetology Career & Technical Articulation Agreement with Douglas Education Center)** **Grades 10-12**  
***CIP Code: 12.0401, 3 or more credits/year.***

**Industry Certifications Available:** Cosmetology License, Manicurist, Esthetician, S/P2 Cosmetology Safety & Pennsylvania Skills 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.

**Culinary Arts (Program of Study)**  
***CIP Code: 12.0508, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** ServSafe Manager Food Safety, ServSafe Food Handler, S/P2 Culinary Safety and Pollution Prevention, & Pennsylvania Skills 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.

**Diesel Technology (Program of Study)**  
***CIP Code: 47.0613, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, SP/2 Heavy Duty Safety and Pollution Prevention, Forklift-Classes 1, 4, 5 & Pennsylvania Skills 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.

**Electrical Construction (Program of Study)**  
***CIP Code: 46.0399, 3 or more credit/year.***

**Grades 10-12**

**Industry Certifications Available:** Pennsylvania Builder's Association Certification (PBA) & Pennsylvania Skills Certification

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.

**Health Assistants (Program of Study)**  
***CIP Code: 51.0899, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** Patient Care Technician/PCT, Basic Life Support Health Care Providers, & Pennsylvania Skills 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 health care 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.

**Heating, Ventilation, Air Conditioning & Refrigeration (Program of Study)**  
***CIP Code: 47.0201, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** EPA 608 Technician Certification, Pennsylvania Builder's Association Certification (PBA), & Pennsylvania Skills Certification

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.

**Medical Professions (Program of Study)**  
***CIP Code: 51.9999, 3 or more credits/year.***

**Grades 10-12**

**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.

**Public Safety (Career & Technical Articulation Agreement with Penn Commercial Business/Technical School)**      **Grades 10-12**  
***CIP Code: 51.0904, 3 or more credits/year.***

**Industry Certifications Available:** Emergency Medical Technician, National Incident Management System, Basic Life Support Health Care Providers, CPR-American Heart Association, Stop the Bleed, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single and Extension Ladder & 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.

**Sports Medicine & Rehabilitation Professions (Career & Technical Articulation Agreement with California University)**      **Grades 10-12**  
***CIP Code: 51.2604, 3 or more credits/year.***

**Industry Certifications Available:** 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.

**Veterinary Assistant (Program of Study)**  
***CIP Code: 01.8301, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available** OSHA-10 Health Care, Red Cross Pet Tech First Aid, Purina Weight Coach, Fear Free & 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 practice-related 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.

**Welding (Program of Study)**  
***CIP Code: 48.0508, 3 or more credits/year.***

**Grades 10-12**

**Industry Certifications Available:** AWS Certification, SP/2 Welding Safety Pollution and Prevention, & Pennsylvania Skills Certification

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.

## Extracurricular Activities

Steel Valley High School offers a multitude of activities, clubs and athletics for student participation. We encourage all students to be involved with as many programs in which they may have an interest. These programs were designed to reinforce the content areas via a fun, social, and informal setting. All the programs we offer are school sanctioned and provide students unique opportunities that may not be obtainable in the regular classroom setting. Our programs were created based on student interest and will continue to evolve as an integral part of our school community.

### Clubs

Clubs are co-curricular organizations which may be formed by the following methods: (1) a group of students with the same interests who then obtain a faculty sponsor, or (2) a faculty member who initiates a club, recruits members, then applies to the office for a charter.

- There are to be no secret fraternities or sororities or clubs that restrict race, creed or color; or clubs that promote a specific religious sect or political party.
- Club meetings will be called by club sponsors only, with the approval of the office.
- Clubs, organizations and classes that conduct fund-raising campaigns must secure permission from the principal.
- Clubs and organizations may advertise approved events or campaigns by means of posters, however, posters are not to be pasted or taped to painted walls. All advertisements must be removed by the sponsoring group at the conclusion of the event.

The following clubs and sports are currently recognized by the Steel Valley High School:

Art Club	Senior Class Officers	National Honor Society	Student Government
Band	World Language Club	Prom	Choir
Drama	History Club	Global Hands	GSA
SADD	Stand Together		

### Fall

Cheerleading	(Boys/Girls) Cross Country	Football (JV and Varsity)	Golf
Boys Soccer	Girls Soccer	Girls Volleyball (JV and Varsity)	

### Winter

Boys Basketball (JV and Varsity)	Cheerleading	Girls Basketball (JV and Varsity)	(Boys/Girls) Swimming
Wrestling (Co-Op)	Bowling	9 <sup>th</sup> Grade Boys Basketball	

### Spring

Baseball (JV and Varsity)	Softball	Boys Volleyball (JV and Varsity)	
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