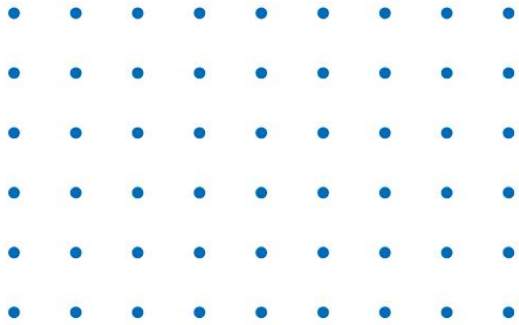




SOUTH PARK HIGH SCHOOL



**2024-2025**

# PROGRAM OF STUDIES

**2005 EAGLE RIDGE DRIVE  
SOUTH PARK, PA 15129**



412-655-3111



412-655-1463



[www.sparksd.org](http://www.sparksd.org)

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Jason Marvin, *Assistant Principal*

## HIGH SCHOOL COUNSELORS

Bethany Chicora-Lewis (A-L)  
Natalie Liptak (M-Z)

## MISSION STATEMENT

***Fostering a student-centered culture of lifelong learners, difference makers, and global citizens.***

*The South Park School District is an equal opportunity educational institution and does not discriminate on the basis of race, color, national origin, sex and handicap 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, contact Ms. Chelsea Campolongo, Title IX Coordinator, at 2005 Eagle Ridge Drive, South Park, PA 15129 (412-655-3111).*



## FOREWARD

This Program of Studies has been prepared to assist students in planning an effective and continuous educational program. It provides information for broad curricular choice, individual course selection, and academic information. The curricular offerings are varied to meet the individual talents, abilities, and interests of all students. Curricular choices should be planned to include the entire high school sequence to ensure high school graduation as well as preparation for post-secondary education and/or employment.

In selecting courses of study, careful thought should be given to student ability, past academic achievement, and future educational and vocational goals. Students and parents are urged to consult with school personnel whenever questions arise in regard to educational planning.

Students should use this publication as a reference in the future. We further urge students to choose a workload, which fits their needs and abilities as well as one which will allow them to participate in extracurricular activities during their high school career.

## CURRICULUM PHILOSOPHY AND POLICY

We encourage every student to pursue a rigorous, comprehensive curriculum each year. The 25.25 credit core curriculum required for graduation is only a minimum standard and students are required to carry a minimum of 7.0 credits per year. Strength of schedule [Academic, Honors, College in High School (CIHS), and Advanced Placement courses, as well as challenging, meaningful and varied electives] is valued by post-secondary institutions.

## THE SCHEDULING PROCESS

The students and parents are highly encouraged to complete the [scheduling form](#) together, choosing courses that best fit the student's abilities, interests, college, and/or career goals.

Once the [scheduling form](#) is completed by students and parents, the students should also discuss course selection with their teachers. The teacher recommendation will be based upon certain prerequisites applicable for each course.

## SCHEDULE ADJUSTMENTS

Once the master schedule is created, based on student requests, **no schedule changes** will be permitted after the designed drop / add period. Within the first ten (10) days of a course, students will be permitted to submit the Schedule Change Application form (available in the HS Counseling Office) to either add or drop a course for the following reasons. Approved changes are made on a space-available basis:

1. Scheduling error: (Missing period, Missing lunch)
2. Academic: Incorrect course level, Graduation Deficiency
3. College/Career Plans Change
4. Summer School Work Completed
5. Work Release/Dual Credit
6. Study Hall/ Electives: Students may also add an elective course in order to eliminate a study hall or drop an elective course if they are without a study hall. Adding a study hall will only be considered if students are on pace with their graduation requirements. Students are not permitted to change electives, or to request a specific teacher or specific lunch period.

**PLEASE NOTE:** Meeting any of the conditions listed above does not mean the automatic granting of a schedule change. There are times when the student's course change request cannot be met due to full classes, unavailability of classes at appropriate times necessary to meet the student's needs or other similar circumstances. Classes may be added or dropped during the first ten days of the course with no impact on the student's transcript.

## PLACEMENT/LEVEL CHANGES: ACADEMIC, HONORS, CIHS AND ADVANCED PLACEMENT COURSES

Students are recommended for courses based upon established criteria in the previous level course and teacher review of course selections. Before a course placement change is considered, the student must demonstrate attempts to improve his/her grade (completing all homework, conferencing with teacher, and after school tutoring).

After the first ten (10) days of a course, the student and teacher may have a conference and begin to complete a form to request a placement change. If the course placement change is approved, the grade from the previous course will follow them to the newly approved course.



**Placement and level changes will only be considered if all of the following have occurred:**

- Teacher and student have a conference and begin completing the input forms
- Academic Team Meeting
- Student completes all homework
- Student attends tutoring (must attend at least 3 sessions)
- Counselor, Teacher, Administrator discussion and approval

**Course(s) Withdrawal:** In the event that a student would want to drop a course after the 10-day period, a designation of “WF” (withdraw failing) will appear on the student’s transcript. This becomes part of the student’s permanent record. However, for level schedule changes, the student’s percentage of achievement in the original course will be transferred to the new course and no “WF” will appear on the transcript. Students may not withdraw from a semester course after 4 weeks or from a year long course after the first 9 weeks.

**PLEASE NOTE:** Classes with less than 10 students enrolled could be dropped from the master schedule. Students will be notified and afforded the opportunity to choose another class.

## TRANSCRIPTS

Official Transcripts requested to be sent to colleges/universities will be processed no earlier than 2 weeks after the first day of the current school year. This will ensure that the students’ academic records are correct and that their current schedule is accurate. Please note that only one initial transcript can be sent to each college via [Naviance](#), which can be found on the student’s links page of [www.sparksd.org](http://www.sparksd.org). Additionally, only transcript requests made via [Naviance](#) will be processed. No email requests from parents or students will be considered official.

## GRADE CLASSIFICATION

For a student to enter South Park High School as a 9th grader, proper educational achievement must be attained through 8th grade. If a student fails any major subject in grade 8, he/she is expected to make-up the failed course(s) in a certified summer school. **No more than two summer school courses may be taken in the summer.**

For a student to be considered a member in proper academic standing of his/her next year’s class:

1. A student must have earned a minimum of 6 credits to be considered a Sophomore.
2. A student must have earned a minimum of 12 credits to be considered a Junior.
3. A student must have earned a minimum of 18 credits to be considered a Senior.

## CREDIT CLASSIFICATION

Course Credit is given as official acknowledgement that a student has successfully completed the course (60% or better) and has met the attendance policy requirement

## REPORTS TO PARENTS

Parents are able to access their child’s grades through [PowerSchool](#). The grades are uploaded weekly which gives parents up-to-date information on their child’s progress. Directions for setting up a secure account and accessing student information will be passed out to students. Attendance, discipline and homework assignments are also available through the website.

## HONOR ROLL AND ASSESSMENT POLICY

Honor rolls are published at the end of each nine-week period. To be on the high honor roll students must have a grade average of 92%. To be on the honor roll, students must have a grade average of 85%. Students who have received below a 73% or an incomplete in any subject will not be on the honor roll. If a student is issued an incomplete "I" on their report card - the student has 2 weeks (10 school days) from the last day of the marking period to make up any missing work. Any work not completed within the 2-week period will be adjusted to a zero mark.

### SOUTH PARK HIGH SCHOOL STANDARD GRADING SCALE

Grade	Percentage	Regular Course	Honors Course	AP/CIHS Course
A	100-90	4.00	4.50	5.00
B	89-80	3.00	3.50	4.00
C	79-70	2.00	2.50	3.00
D	69-60	1.00	1.00	1.00
F	Below 60	0.00	0.00	0.00

### STEEL CENTER CTC GRADING SCALE

Grade	Percentage
A	100-90
B	89-80
C	79-70
D	69-60
E	Below 60

## WEIGHTED COURSEWORK ADVANCED PLACEMENT COURSES

According to The College Board, Advanced Placement students are able to experience the rigors of college-level studies while they still have the support of a high school environment. Resourceful and dedicated Advanced Placement teachers help their students develop and apply the skills, abilities, and content knowledge they will need later in college. By participating in the Advanced Placement courses exam, your child has the opportunity to earn possible college credit and stand out in the college admission process. Students must partake in the AP Course Exam(s) to be eligible to receive credit for the course. Students participating in the AP course exam will be eligible for a weighted grade for their high school course.

The following AP Courses are offered:

### **ENGLISH**

AP English Language and Composition  
AP English Literature and Composition

### **MATH**

AP Calculus AB  
AP Computer Science  
AP Computer Science Principle  
AP Probability and Statistics

### **SCIENCE**

AP Biology  
AP Chemistry  
AP Physics

### **SOCIAL STUDIES**

AP European History  
AP Micro/Macro Economics  
AP U.S. History  
AP World History

## COLLEGE IN HIGH SCHOOL COURSES

College in High School (CIHS) offers high school students the opportunity to earn both high school and college credit in courses taught right in their classrooms. CIHS is an academically rigorous program for motivated students seeking an intellectual challenge within a supportive high school environment. CIHS-certified high school teachers work closely with college/ university faculty to teach a high school course that is also a college course. Students use college-level textbooks, take college-level exams, and upon successful completion of the class, earn college credit that is recorded on an official college transcript. CIHS grades are generated from assessments throughout the course. The CIHS credits are equivalent to on-campus courses and highly transferable to colleges and universities across the country. Some of the college/ universities that South Park High School partners with are: University of Pittsburgh and Robert Morris University.

The following CIHS Courses are offered:

African American Literature  
Probability and Statistics  
Financial Accounting  
Management Theory and Practice  
Computer Science  
Law Business and Society

Prerequisites for these courses are outlined in the Program of Studies.

## DUAL CREDIT

Students are permitted to participate in a dual credit program in association with local colleges and universities. Specific guidelines can be obtained through individual guidance counselors. **Students must have an overall grade average of 75% or above (2.5 GPA) to be eligible.** All costs will be incurred by the family. **[Click here to review all dual credit programs.](#)**

## EARLY RELEASE FROM SCHOOL

Students in their senior year at South Park High School will have the opportunity to apply for early release from attending a full day of school at SPHS for two purposes, Employment or Dual Credit. The early release program will only be used for students who are making adequate progress\* toward graduation requirements and whose class schedule permits the early dismissal. Students will be released from SPHS on a daily basis, upon administrative, parental and employer approval, if they qualify under one of the following situations and all criteria are met.

\*Adequate progress is defined as having earned 20 credits, passing all classes needed for graduation.

### 1. Situation #1: Work Release

- Students are employed 15 or more hours a week at an administratively approved place of employment.
- Students will also need to provide pay stubs on a monthly basis.
- Students upload his/her work schedule to the Work Release Google classroom on a weekly basis
- Students will also submit a summary of their performance on a bi-weekly basis

### 2. Situation # 2 Dual Credit

- Students are enrolled in at least one class through the dual credit program.
- Dual Credit Application and Proof of Class Registration must be supplied to the high school and will be kept on file.

Termination Policy: If release time is granted and the student's employment or college classes cease for any reason, or the student is failing high school courses or accumulates illegal absences then the student must notify the school and return to full time attendance at SPHS immediately.

## **WPIAL/PIAA ELIGIBILITY REQUIREMENTS**

The South Park School District students who participate in the interscholastic athletics program, a member of the Pennsylvania Interscholastic Athletic Association, Inc. ("PIAA"), must comply with PIAA eligibility rules. According to the WPIAL/PIAA, if a student fails to comply with the eligibility rules, the student forfeits their participation in interscholastic athletics. If a student participates while ineligible, the student, the school, and/or the team will be penalized.

The WPIAL/PIAA has set forth the following academic and curricular requirements for interscholastic student-athletes:

- The student must pursue a full-time curriculum defined and approved by your Principal.
- The student must be passing, at least, four full-credit subjects, or the equivalent, as of each Friday during a grading period. If you fail to meet this requirement, you will lose your eligibility from Sunday through the next Saturday after grades are checked again on Friday.
- The student must have passed at least four full-credit subjects or the equivalent during the previous grading period. Eligibility for the first grading period of the new school year is based on your final grades from the previous school year. If a student fails to meet this requirement, they will lose their eligibility for at least 15 school days of the next grading period, beginning on the first day that report cards are issued. If a school has four grading periods, students will be ineligible for at least 15 school days.

The Principal of your school is responsible for certifying your athletic eligibility. If you have any questions concerning your athletic eligibility, either now or in the future, please refer to the Student Athletic Handbook or contact the Athletic Director, Mr. Patrick Colligan (412-655-3111 x 2050).

## **SUMMER SCHOOL**

Students who did not pass one or more required courses are encouraged to attend summer school to make-up the lost credit. Students are able to take up to 2 classes during summer school sessions. Information regarding accredited summer schools in our area may be obtained in the counseling office. Grades for repeated courses are placed on the transcript. They do not replace the original grade already on the transcript. Summer school grades will be factored into the student's QPA.

## **REQUIREMENTS FOR GRADUATION**

- I. Graduation from South Park High School is based on the standards set by the Pennsylvania Department of Education and the South Park Board of School Directors.
  - A. Scholastic achievement in Grades 9, 10, 11 and 12 determines a student's status for graduation.
  - B. All students must have successfully completed a total of 25.25 credits in grades 9, 10, 11, and 12 in order to become eligible for a diploma.

### **Summary of minimum graduation requirements:**



English 4.00 Credits

Social Studies 4.00 Credits\* (Must include Civics/Equivalency, Western Civ./Equivalency & U.S. History/Equivalency)

\* Students who attend Steel Center are only required to earn 3 Social Studies credits to graduate

Mathematics 3.00 Credits (Must include an Algebra and a Geometry Course)

Science 3.00 Credits (Must include Biology)

Health 0.25 Credit (online)

Phys Ed. 1.00 Credit

Computer Applications 0.5 credit

College and Career Preparation 0.5 credit

Electives 9 Credits - Students will select additional credits from any content area in the curriculum to complete minimum requirements of 25.25 credits for graduation.

**C. Commencement Participation** - In order to participate in the commencement ceremony, a student must have earned 24 credits by the end of their senior year, prior to the commencement ceremony. **No exceptions are made.** Students may process if they are short no more than one core credit provided, they can present proof of registration in an approved summer school program for the (1) credit prior to the commencement ceremony. A total of 25.25 credits are required for graduation. In addition, students must have met all outstanding financial obligations.

**D. Keystone Pathways** - Pennsylvania high school students have the option to demonstrate their postsecondary preparedness and meet statewide requirements through one of five Pathways to Graduation.

1. **Keystone Proficiency Pathway:** Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.
2. **Keystone Composite Pathway:** Earning a composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams (while achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two).
3. **Alternate Assessment Pathway:** Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and one of the following:
  - Attainment of an established score on an approved alternate assessment SAT (1010), PSAT (970), ACT (21), ASVAB (310);
  - Attainment of an established score on an Advanced Placement Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve at least a proficient score;
  - Successful completion of a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;
  - Successful completion of a pre-apprenticeship program; or
  - Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.
4. **Evidence Based Pathway:** Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and demonstration of three pieces of evidence consistent with the student's goals and career plans, including one of the following:

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

**5. CTE Pathway:** For Career and Technical Education (CTE) Concentrators, successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and attainment of an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study.

More information about the new statewide graduation requirement effective with the graduating class of 2023 is available on the [PDE website by clicking here](#). Additionally, see charts below.

# Pennsylvania Pathways to Graduation

## Keystone Proficiency Pathway *Numeric or Non-Numeric Scores*

**Algebra I**  
Proficient or Advanced

**Biology**  
Proficient or Advanced

**Literature**  
Proficient or Advanced

## Keystone Composite Pathway *Numeric Scores Only*

At least 1 Keystone Exam scaled score is  
**1500 or Greater**

No Keystone Exam score is  
**Below Basic**

The Keystone Exam 3-score composite is  
**4452 or Greater**  
The Keystone Exam 2-score composite is  
**2939 or Greater**  
*(where eligible under §121.1)*

### CTE Concentrator

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient

**CTE Concentrator**  
1 Artifact from pathway criteria

### Alternative Assessment

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient

**Alternative Assessment**  
1 Artifact from pathway criteria

### Evidence-Based Pathways

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient

**Evidence-Based**  
3 Artifacts from pathway criteria

### Waiver

A student in 12th grade, or experiencing extenuating circumstances, who meets locally established grade-based requirements for Keystone content area(s) in which the student is less than proficient, and is unable to satisfy the requirements of a graduation pathway may be granted a waiver by the chief school administrator.

### Individualized Education Plan

A student with a disability who is unable to satisfy pathway requirements but who satisfactorily completes a special education program is granted a diploma under Title 22 §4.24.

**NOTE:** Although this infographic displays a sequential progression, students may fulfill criteria under the CTE Concentrator, Alternative Assessment, or Evidence-Based Pathways prior to demonstrating proficiency in Keystone academic content through Keystone Exam scores or locally established grade-based requirements.

# Pathway Criteria

CTE Concentrator	Alternative Assessment	Evidence-Based
<p style="text-align: center;"><b>1 Artifact</b></p>	<p style="text-align: center;"><b>1 Artifact</b></p>	<p style="text-align: center;"><b>3 Artifacts consistent w/student goals</b> <b>ONE or more from Section One</b> <b>No more than TWO from Section Two</b></p>
<p>Industry-based competency certification</p> <hr/> <p>Likelihood of industry-based competency assessment success</p> <hr/> <p>Readiness for continued engagement in CTE Concentrator program of study</p>	<p>Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010)</p> <hr/> <p>Attainment of Gold Level or better on ACT WorkKeys</p> <hr/> <p>Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient</p> <hr/> <p>Successful completion of a pre-apprenticeship program</p> <hr/> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4yr program for college-level coursework</p>	<p style="text-align: center;"><b>Section 1</b></p> <hr/> <p>Attainment of 630 or better on any SAT Subject Test</p> <hr/> <p>Attainment of Silver Level or better on ACT WorkKeys</p> <hr/> <p>Attainment of 3 or better on any AP Exam</p> <hr/> <p>Attainment of 3 or better on any IB Exam</p> <hr/> <p>Successful completion of any concurrent enrollment or postsecondary course</p> <hr/> <p>Industry-recognized credentialization</p> <hr/> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program</p> <hr/> <p style="text-align: center;"><b>Section 2</b></p> <hr/> <p>Attainment of Proficient or Advanced on any Keystone Exam</p> <hr/> <p>Successful completion of a service-learning project</p> <hr/> <p>Letter guaranteeing full-time employment or military enlistment</p> <hr/> <p>Completion of an internship, externship, or cooperative education program</p> <hr/> <p>Compliance with NCAA Division II academic requirements</p>



## NCAA ELIGIBILITY REQUIREMENTS

The NCAA Eligibility Center certifies whether prospective college athletes are eligible to play sports at NCAA Division I or II institutions. It does this by reviewing the student-athlete's academic record, SAT or ACT scores, and amateur status to ensure conformity with NCAA rules.

- To be eligible to compete in NCAA sports in college, you must maintain minimum standards for your SAT/ACT and high school GPA, along with meeting the requirements for courses completed in high school.
- Student athletes must register with the NCAA Eligibility Center to be eligible to play NCAA Division I or II sports in college. Visit [www.eligibilitycenter.org](http://www.eligibilitycenter.org) for registration and information.
- There is a fee involved.

**Please Note:** If you are planning to participate in a Division I or Division II sport in college, please see your counselor *prior to scheduling courses*. The college-bound student-athletes who want to practice, compete, and receive athletically related financial aid during their first year at a Division I or II sport must meet the minimum requirements for core courses as established by the NCAA.

### Test Scores

In January 2023, NCAA Divisions I and II adopted legislation to remove standardized test scores from initial-eligibility requirements for **all** student-athletes who initially enroll full time on or after August 1, 2023. Check with the NCAA school you plan to attend regarding whether standardized test scores are necessary for admission or scholarship requirements.

### DIVISION I

#### 16 Core Courses

4 years of English.

3 years of mathematics (Algebra I or higher).

2 years of natural/physical science (1 year of lab if offered by high school).

1 year of additional English, mathematics or natural/physical science.

2 years of social science.

4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).

### DIVISION II

#### 16 Core Courses

3 years of English.

2 years of mathematics (Algebra I or higher).

2 years of natural/physical science (1 year of lab if offered by high school).

**3** years of additional English, mathematics or natural/physical science.

2 years of social science.

4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).

## COURSE DESCRIPTIONS ENGLISH LANGUAGE ARTS OFFERINGS

Required Course Offerings: Each student must be enrolled in one of the required English courses each year. In order for a student to be eligible for graduation, the student must satisfactorily complete 4.0 credits of English. Students who meet the criteria for Honors, CIHS, or AP level classes may elect to take those.

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
<b>Required</b>	<b>English 9</b>	<b>English 10</b>	<b>English 11</b>	<b>English 12</b>
	<b>English 9 Honors</b>	<b>English 10 Honors</b>	<b>AP Language &amp; Composition</b>	<b>AP Literature &amp; Composition</b>
<b>Electives</b>	<b>Public Speaking</b>	<b>Public Speaking</b>	<b>Public Speaking</b>	<b>Public Speaking</b>
	<b>Contemporary Novels</b>	<b>Yearbook</b>	<b>Yearbook</b>	<b>Yearbook</b>
	<b>Creative Writing</b>	<b>Contemporary Novels</b>	<b>Contemporary Novels</b>	<b>Contemporary Novels</b>
	<b>Journalism/ Art of Writing</b>	<b>Creative Writing</b>	<b>Creative Writing</b>	<b>Creative Writing</b>
		<b>Journalism/ Art of Writing</b>	<b>Journalism/ Art of Writing</b>	<b>Journalism/ Art of Writing</b>
		<b>CIHS 20th Century African American Literature</b>	<b>CIHS 20th Century African American Literature</b>	

### 0100 CIHS 20TH CENTURY AFRICAN AMERICAN LITERATURE

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Successful completion of current English course

This course is an advanced course focused on the topics, form, and function of African American Literature as they develop throughout the 20th century. The course is meant to provide students with both a broad framework to understand the modern history of this category of literature and the opportunity to practice selective, in-depth analyses of formal, thematic, and argumentative movements within and between specific examples in the time period. The readings and discussions are usually organized historically but can have additional organizational interests focused on genre/medium, the borders of African American literature, the cultural or political work being done by the literature, or the relationship between 20th century African American

literature and the 21st century reader. Students are required to examine the content of the course in the form of a sustained final written assignment. Students will draw viable and meaningful conclusions about the historical efficacy of African American literature based on the content and form of the readings, demonstrate an understanding of the impact of historical context on literary representation, and be able to meaningfully compare and contrast the racial politics of today to those of early, mid, and late 20th century America.

**Career Preparation:** Writing, Publishing, Education, Communications, History, Literary Criticism

## 0102 ENGLISH 9

*Grade: (9)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

Students will read a variety of short stories, poems, novels, as well as a dramatic work. In class, students will respond to the assigned literature by analyzing characterization, author's purpose, theme, and figurative language. Responses will be given in the form of tests, quizzes, projects, presentations, and essays. Additionally, the class will focus on the use and application of grammar and vocabulary. This course will prepare students for the Keystone Exam given in Grade 10 as well the SAT.

**Career Preparation:** Human Resources, Communications, Journalism, Law, Education, Marketing, Technical or Creative Writing, Public Relations

## 0103 HONORS ENGLISH 9

*Grade: (9)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** A grade of 90% or better in Accelerated English 8

This course will begin with an independent summer reading assignment prior to the beginning of the school year followed by an objective test **when students return to school. Throughout the course of the year, we will read a variety of short stories, poems, and several novels as well as a dramatic work.** In addition, students will respond to assigned literature, including but not limited to, quizzes, tests, projects, presentations, and essays. Grammar and vocabulary will be incorporated into this course to prepare for the upcoming Keystone Exam given in Grade 10 as well as the SAT.

**Career Preparation:** Mass Media/Communications, Journalism, Law, Education, Technical or Creative Writing, Public Relations

## 0105 ENGLISH 10

*Grade: (10)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Successful completion of English 9 or English 9 Honors

This class covers several time periods of world literature. The genres of short fiction, nonfiction, poetry, drama, and novel will be covered throughout the year. Assessments include speeches, group projects, quizzes, and tests. Also, there are several writing projects such as formal, multi-page assignments and in-class timed assignments. Preparation for the Keystone Exam will also be a focus of English 10 CP through the study of short excerpts, grammar, and practice tests. The Keystone Literature Exam is a requirement at the end of the course.

**Career Preparation:** Human Resources, Communications, Journalism, Law, Education, Marketing, Technical or Creative Writing, Public Relations

## 0106 HONORS ENGLISH 10

*Grade: (10)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Must have a teacher recommendation **-OR-** a 80% or better in English 9 Honors or 90% or better in English 9

Students will become stronger readers and develop analytical skills essential for success in college. Students will encounter a wide variety of engaging works of world literature from various time periods and literary movements. This class welcomes an open exchange of ideas, so active, voluntary participation is essential for success in this course. The independent study of SAT vocabulary and a research paper is part of the curriculum. Note that reading and writing outside of class will be required; a summer reading may be assigned. Students are required to take the Keystone Exam in Literature at the end of the course.

**Career Preparation:** Communications, Education, Human resources, Journalism, Law, Marketing, Public Relations, Publishing, Technical or Creative Writing; Any career requiring analytical thinking

## 0108 ENGLISH 11

*Grade: (11)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** A grade of a 70% or higher in English 10, English 10 Honors

In English 11, students will read a variety of poetry, short stories, novels, plays, and essays. Literature will focus both on fiction and nonfiction from a variety of American authors and time periods. Students will hone their analysis and critical thinking skills, formal and creative writing skills, and public presentation and speaking skills.

**Career Preparation:** Human Resources, Communications, Journalism, Law, Education, Social Media Marketing, Technical or Creative Writing, Public Relations

## 0111 ENGLISH 12

*Grade: (12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

English 12 covers several time periods and genres of British literature. There will be a focus on note taking, testing, and projects. There are opportunities for independent learning and cooperative learning throughout the course of the year. A major focus of the course is an extensive research project. A research project is a requirement and centers around the research of a chosen historical topic and compiling that research into a formal paper of approximately ten pages.

**Career Preparation:** Human Resources, Communications, Journalism, Law, Education, Social Media Marketing, Technical or Creative Writing, Public Relations.



## 0113 YEARBOOK

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

This course is geared for students who are interested in the fields of journalism, communications, photography, design, marketing, and/or business. Students will learn the design skills needed to produce the South Park High School Yearbook. Through this process, students will understand how to use an online software program. Additionally, students will learn skills including how to write copy, edit copy and captions, select fitting headlines and subheadings, take high-quality photos, and edit photos. Also, students will complete interviews and gain knowledge on how to manage a business through fundraising and budgeting for the book. As an extension of the course, students must be available to attend events outside of the standard school day in order to get pictures, interviews, and market the book to the public. Students who are unavailable or unwilling to attend after-school events and/or meetings should not sign up for this course.

**Career Preparation:** Human Resources, Communications, Journalism, Law, Education, Marketing, Technical or Creative Writing, Public Relations

## 0114 CONTEMPORARY NOVELS

*Grade: (9-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This is a semester course for students who love to read and talk about what they've read. Students will read selections by modern authors from all different backgrounds. Class readings will be chosen by the teacher/student, but there will be an independent reading assignment as well. Time in this class will be spent discussing, writing journals and book reviews, and completing projects. Students will need to read independently outside of class.

**Career Preparation:** Writing, Publishing, Communications, Social Media

## 0115 AP ENGLISH LANGUAGE AND COMPOSITION

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Must have a teacher recommendation.

This course is geared for eleventh or twelfth grade students who are able to read and comprehend college-level texts and apply evidence in their writing. Students will compose evidence-based analytic and argumentative essays about a variety of subjects by utilizing the various stages of the writing process. Nonfiction texts from many disciplines and historical periods will be analyzed for rhetorical strategies and their effects. The course will prepare students for the Advanced Placement test, which they are encouraged to take in May to earn college credit. Outside reading and writing is required to be successful in this course, which may include summer reading.

**Career Preparation:** Writing, Publishing, Communications, Law, Education

## 0116 ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

*Grade: (12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Must have teacher recommendation.

This course is geared for twelfth grade students that provides an authentic college learning experience and will prepare students for the Advanced Placement test, which they are encouraged to take in May for the opportunity to earn college credit. Students will have the opportunity to read and discuss fiction and poetry from various genres, cultures, and periods in history. In addition to gaining the skills for college-level analysis, students will know how to properly share their ideas through class discussion, group activities, and formal essays. This class welcomes an open exchange of ideas, so active, voluntary participation is essential for success in this course. Note that reading and writing outside of class will be required; a summer reading may be assigned.

**Career Preparation:** Communications, Education, Human resources, Journalism, Law, Marketing, Public Relations, Publishing, Technical or Creative Writing; Any career requiring analytical thinking

## 0119 PUBLIC SPEAKING

*Grade: (9-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This single-semester course is designed to help students develop core public speaking skills. Students will receive instruction in speech writing and delivery, non-verbal communication, presentation aids, and rhetorical techniques. In addition, students will gain practical, hands-on experience composing and delivering their own speeches, including informative, persuasive, special occasion, and extemporaneous formats. Participation in various group activities will help to increase student confidence and refine verbal communication skills. Students will be required to demonstrate learning by delivering multiple speeches in front of live audiences. Upon completion of the course, students should possess the confidence and skill set necessary to become more effective communicators in a classroom, workplace or community setting.

**Career Preparation:** Communications, Education, Human resources, Journalism, Law, Marketing, Public Relations, Publishing, Technical or Creative Writing; Any career requiring interpersonal communication

## 0121 CREATIVE WRITING

*Grade: (9-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

In this single-semester course, students will have the opportunity to uncover or rediscover a passion for writing. Students will work together in a collaborative setting as they learn strategies to write their own short stories, poems, screenplays, and works of creative nonfiction. Students will also learn how to provide and accept feedback in a constructive manner. Ultimately, students will design, publish, and receive a compilation that celebrates their favorite creations from the class. This is a production-based course that teaches through experience, so prospective students should anticipate writing in some form on a daily basis.

**Career Preparation:** Communications, Editing, Education, Human resources, Journalism, Marketing, Public Relations, Publishing, Technical or Creative Writing; Any career requiring written communication

## 0125 JOURNALISM

*Grade: (9-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Grade of a 80% or better in the previous year's English course.

Students in this course will participate in the publication of the school newspaper, *The SPress*. Classes will include discussions, workshops, group and individual meetings, writing, revising, and publishing. Students should be mindful that the skills honed in English class will also apply to this class, especially grammar and usage. This course will require mandatory time outside of the classroom for special projects and assignments on location. Success in this course is directly correlated to the extensive writing expected of students and meeting deadlines. Students taking this course should have an interest in research, interviewing, and writing.

**Career Preparation:** Writing, Publishing, Mass Media/Communications

## COURSE DESCRIPTIONS SOCIAL STUDIES COURSES OFFERINGS

Required Course Offerings: Students must successfully complete 4.0 credits of social studies in the areas of American Civics, Western Civilization, and US History. Students who meet the criteria for AP level classes may elect to take those. Below is the recommended courses sequence by grade.

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	<p><b>American Civics and PA History</b></p> <p><b>American Civics and PA Civics Honors</b></p>	<p><b>Western Civilization</b></p> <p><b>Western Civilization Honors</b></p> <p><b>AP World</b></p> <p><b>AP European History</b></p>	<p><b>US History</b></p> <p><b>US History Honors</b></p> <p><b>AP US History</b></p>	<p><b>Honor Law</b></p> <p><b>International Relations</b></p> <p><b>Economics</b></p> <p><b>AP World</b></p> <p><b>Psychology</b></p> <p><b>Sociology</b></p> <p><b>Modern Issues in American Society</b></p> <p><b>AP Micro/ Macro Economics</b></p>
Electives	<p><b>AP World</b></p>	<p><b>Economics</b></p> <p><b>Honors Law</b></p> <p><b>International Relations</b></p>	<p><b>Psychology</b></p> <p><b>Sociology</b></p> <p><b>Economics</b></p> <p><b>Honors Law</b></p> <p><b>International Relations</b></p> <p><b>AP World</b></p>	<p><b>Honor Law</b></p> <p><b>International Relations</b></p> <p><b>Economics</b></p> <p><b>AP World</b></p> <p><b>Psychology</b></p> <p><b>Sociology</b></p> <p><b>Modern Issues in American Society</b></p> <p><b>AP Micro/ Macro Economics</b></p>

## 0201 AMERICAN CIVICS & PENNSYLVANIA HISTORY

*Grade: (9)*

*Credit: 1.0*

### **RECOMMENDED PREREQUISITE: None**

This course will introduce the student to all aspects of the American Governmental System and the responsibilities of good citizenship. This class will allow the participants to fully understand and be able to actively participate in the democratic system in which we live. Students will explore the following themes while enrolled in the course: Anarchy and how every people-group has combated it, the role of government, origins and workings of the U.S. Constitution, the role and powers of Congress, the Executive branch, the Judicial System and Supreme Court rulings, Federalism economic policy, foreign policy and national security, fundamental freedoms, individual rights, protection of civil rights, interest groups and public opinion, political parties, the electoral process, local-state-federal government, and comparisons between political and economic systems. Pennsylvania History will be presented and introduced with an overview of the relationship between the British Empire and the colonists of Pennsylvania during the colonial period. We will also examine the following themes as they pertain to PA History: Pennsylvania's role during the formation of the U.S., Pennsylvania as the world's industrial giant, The history of Pittsburgh, South Park History, Famous Pennsylvanians and Pennsylvania state government.

This class is conducted using the Socratic-method as the foundation of our study. Interpersonal communication and constructive dialogue as it relates to political topics will manifest itself with the students completing weekly current event assignments (with a student based opinion related component which in no way will be influenced, prompted, or shaped by the instructor).

**Career Preparation:** Lawyer, Politician, Business Executive, Historian, Researcher, Journalism, Media, Park Ranger, Librarian, Museum Archivist, Military, International Studies, Public Relations, Marketing, Geographer, Genealogist

## 0202 HONORS AMERICAN CIVICS & PENNSYLVANIA HISTORY

*Grade: (9)*

*Credit: 1.0*

### **RECOMMENDED PREREQUISITE: None**

The course objectives and the content areas of study are the same as (201) American Civics and Pennsylvania History. In this particular course the student performance emphasis will be placed upon in-depth reading comprehension, application of critical thinking skills, participation in Socratic-based discussion, personally responsive / in-depth writing applications, and personal analysis of a wide array of political science related topics.

**Career Preparation:** Lawyer, Politician, Business Executive, Historian, Researcher, Journalism, Media, Park Ranger, Librarian, Museum Archivist, Military, International Studies, Public Relations, Marketing, Geographer, Genealogist

## 0203 WORLD HISTORY

*Grade: (10-12)*

*Credit: 1.0*

### **RECOMMENDED PREREQUISITE: None**

Role playing, interactive games, simulations, virtual reality and project-based learning will be the focus of our course as we survey world civilizations from the dawn of humankind to the present. Students will examine world history through the lenses of three frames: communities (how we have organized the communities in which we live), networks (how is our world interconnected), and production and distribution (the ways in which we make and move stuff). While examining multiple perspectives, causation and

continuity and change over time, learners will build a skill set that will enable them to thrive in an ever-changing society. 21st century platforms such as Peardeck, EdPuzzle, Oculus Quest 2, and Flip will be incorporated to enhance student preparation for all careers. Eras of investigation will include: The Agricultural Revolution, Collapses of Early Civilizations, The Silk Road Trading Network, Shoguns & Samurai, Renaissance, Columbian Exchange, Revolutions, Nationalism, Industrialization, Imperialism, World War I & II, The Cold War, Globalization and the Future. Throughout the year, students will be assessed in the areas of class participation, homework assignments, and quiz scores. There will be a strong emphasis on student projects in this class.

**Career Preparation:** Journalist, Social Worker, Social Media Specialist, Police Officer, Educator.

## 0204 HONORS WESTERN CIVILIZATION

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

This course is designed to meet the needs of strong academic students. Western Civilization Honors will investigate significant events, individuals, developments and processes from approximately 1450 to the present. Emphasis will be given to the historical impact of the interactions and exchanges between Europe and the world. Students will develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources' developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. Students will have the opportunity to demonstrate their mastery of content through a variety of assessment strategies including traditional tests and quizzes, individual and group research projects, art history projects and presentations as well as historical simulations and role play activities. Students will also participate in modified versions of AP style writing assessments, including constructing historically defensible claims and evidence-based argument development.

**Career Preparation:** Government and Public Administration, Lawyer, Politician, Historian, Researcher, Librarian, Museum Archivist, Military, and International Studies

## 0205 U.S. HISTORY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

This course is designed to help the student acquire an understanding of our American Heritage. This course will explore the development of America from 1890 to the present. The United States is explored through a wide range of sources, documentaries by noteworthy historians, biographical sketches of pivotal figures, films exploring key events, and debates over controversial issues. The curriculum includes primary and secondary sources. Student's grades will be based on exams consisting of multiple choices and student projects. Students will be expected to complete outside homework assignments and will be given routine open note quizzes to check for understanding. Each unit will contain a video project that will require students to apply historical skills to media representations of historic events and analyze them as secondary resources.

**Career Preparation:** Journalism, Media, Park Ranger, Librarian, Museum Archivist, Researcher, Writer, Business Management, Military

## 0206 HONORS U.S. HISTORY

*Grade: (10-12)*

*Credit: 1.0*



**RECOMMENDED PREREQUISITE:** Civics

Designed to meet the needs of strong academic students. Course content will be the same as the regular class with more emphasis on the use of primary source materials, individualized study of topics, and individual and group research projects. This course will require students to participate in historic role play simulations each unit as an ongoing cumulative examination of the course content. Students examine contrasting policy options and explore the underlying values and interests that drive different perspectives. Students create political cartoons, memorialize historical events artistically, and develop original policy options. Students work in groups to make oral presentations, analyze case studies, and develop persuasive arguments. Students critique editorials, audio and video sources, maps and other visuals for perspective and bias. Students analyze video resources to gather and assess information from leading scholars. The Choices materials empower students with the skills and habits to actively engage with their communities and the world.

**Career Preparation:** Lawyer, Politician, Business Executive, Historian, Researcher, Journalism, Media, Park Ranger, Librarian, Museum Archivist, Military, International Studies, Public Relations, Marketing, Geographer, Genealogist

**0207 ADVANCED PLACEMENT - UNITED STATES HISTORY**

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. Students should be able to read a college-level textbook and write at a college level.

**Career Preparation:** Lawyer, Politician, Business Executive, Historian, Researcher, Journalism, Media, Park Ranger, Librarian, Museum Archivist, Military, International Studies, Public Relations, Marketing, Geographer, Genealogist

**0209 HONORS LAW AND LEGAL STUDIES**

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

Designed to meet the needs of strong academic students who have an interest in American Constitutional Law, government, and the legal field. The course will broaden the students' understanding of the Constitution and influence of the Supreme Court in determining the boundaries of government power as well as limits on protected rights and freedoms in American society. Students will discuss and debate landmark Supreme Court decisions, case law and various legal concepts. Specific focus will be given to the rights and liberties protected by the Constitution of the United States. Students will apply legal reasoning, and Supreme Court precedent to real and hypothetical cases during moot court simulations. Students who have an interest in government, law enforcement and the legal field are strongly encouraged to take this course.

**Career Preparation:** Government and Public Administration, Law, Public Safety, Corrections and Security

## 0210 SOCIOLOGY

*Grade: (11-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This one-semester elective course will introduce students to the study of society and society's problems. Students will gain a better understanding of themselves and their social world. This will include basic concepts of sociology, such as culture, society, groups, relationships, gender roles, adolescence, family and marriage patterns, and social movements. Sociology seeks to describe, explain, and possibly predict various aspects of social life, particularly how the groups and the society of which we are a part influence our lives and how we in turn may bring about changes in our times. Students will be required to participate in a variety of class discussions/activities and to complete independent/group projects, reaction papers, and other types of assessment.

**Career Preparation:** Human Services; Law, Public Safety, Corrections and Security; Education and Training; Marketing; Hospitality and Tourism; Communications

## 0211 PSYCHOLOGY

*Grade: (11-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This one-semester elective course is designed to give students an introduction to several important topics within the discipline of psychology. Units of study will include introduction to the diverse field of Psychology, the Brain, Perception, Memory, Learning, and Psychological Disorders. Students will be required to participate in a variety of class discussions/activities and to complete independent/group projects, reaction papers, and other types of assessment.

**Career Preparation:** Human Services; Law, Public Safety, Corrections and Security; Business Management and Administration; Education and Training; Marketing; Health Sciences; Hospitality and Tourism; Communications

## 0212 ECONOMICS

*Grade: (10-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Civics

Elective course open to 11th and 12th grade students. A one-semester course designed to introduce students to basic economic theories and functions. Students will analyze and simulate how incentives influence our decision making process on everything from what and where to shop for food, to what products businesses decide to produce, or to how much money a particular job pays. Students will look at historical examples of economic recessions, and practice real life skills such as negotiation tactics, analyzing choices and trade offs, and responsible financial investment.

**Career Preparation:** Economist, Entrepreneur, Financial Advisor, Business Management and Administration, Stock Broker, Market Analyst, Trade Representative, Banking, Accounting

## 0213 ADVANCED PLACEMENT EUROPEAN HISTORY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

In AP European History, students investigate significant events, individuals, developments and processes from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources' developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world, economic and commercial development, cultural and intellectual development, states and other institutions of power, social organization and development, nation and European identity, and technological and scientific innovations. Students will be required to complete daily readings outside of class and will frequently respond to AP style writing prompts. This course is designed to be the equivalent of an introductory college or university survey of modern European history.

This course is designed for students who are highly motivated. Strong reading and writing skills are essential for success in the course.

**Career Preparation:** Government and Public Administration, Lawyer, Politician, Historian, Researcher, Librarian, Museum Archivist, Military, and International Studies

**0290 AP WORLD HISTORY: MODERN**

*Grade: (9-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

This global history course is aimed at providing students with a cohesive approach to learning and understanding the history of the world while simultaneously preparing them to take the AP® World History: Modern exam. In this course, you will explore our collective history beginning in 1200 and ending in our present moment. The course will help students learn how to use stories about our connected human past to orient themselves to their "now" and prepare for the future. We're going to cover a lot of ground (and more than 800 years); however, this course is not a typical march-through-time history class that simply presents one event after another. Our World History course will use a set of overarching inquiry problems that are tied to the AP® Course and Exam Description (CED) learning objectives, historical developments, and themes, situated at a variety of scales, to organize and facilitate learning. Students will be assessed in the areas of class participation, homework assignments, test and quiz scores, and student projects.

**Career Preparation:** Historian, Art Director, Archivist, Journalist, Political Scientist, Economist, Professor.

**0214 HONORS INTERNATIONAL RELATIONS**

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** AP World History/World History/Western Civilization Honors/AP European History

Does the existence of nuclear weapons make the world more or less safe? What role will cyber attacks play in the future of warfare? Why do nations form alliances or go to war and what role should the United States play in an ever changing world? For anyone interested in a better understanding of these questions and others like them, International Relations is the class for you. This full year Honors course will provide students with the opportunity to learn about today's global community as well as the history that has led to many of today's global conflicts. Class activities include simulations, debates, current event analysis, and even a class-wide computer simulation which will run simultaneously with other activities to close out the year. The world may appear a chaotic place, but for those students who want to improve it, or just better understand it, International Relations is the class for you.

**Career Preparation:** Ambassador, Lawyer, UN representative, Foreign Service Worker, Armed Services, Trade Representative, Renewable Energy, Supply Chain Analyst, Historian

## 0216 MODERN ISSUES IN AMERICAN SOCIETY

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

Modern Issues is an elective course that provides students with the opportunity to examine the major issues, conflicts, and challenges facing contemporary American Society. As a citizen in a democratic society, students should be informed about a wide variety of political, social, economic and legal issues debated in America as preparation for an active and engaged civic life. Student's will examine those various issues from a historical and contemporary perspective. The topics presented in class will be examined from a wide variety of perspectives and points of view. Students will be encouraged to discuss and to evaluate the pros and cons of various perspectives and solutions. Students will be assessed through objective assessments as well as projects, presentations and participation grades. After completion of the course students will be more prepared to participate and fulfill their civic duties and obligations as active citizens.

**Career Preparation:** Human Services; Law, Public Safety, Corrections and Security; Business Management and Administration; Education and Training; Marketing; Health Sciences; Hospitality and Tourism; Communications

## 0217 ADVANCED PLACEMENT - MICRO/MACRO ECONOMICS

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Civics

This course is divided into 2 semesters: one in microeconomics and one in macroeconomics. It is intended for those students to take both AP tests in May and earn up to six (6) college credits as a result of their scores. Microeconomics will give students a thorough understanding of the principles of economics that apply to individual decision makers and the nature and functions of product markets, and the role of the government in promoting greater efficiency and equity in the economy. Macroeconomics will give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This semester will emphasize the study of national income and price-level determination, the financial sector, stabilization policies, economic growth and international economics.

This course focus is on the theory underlying basic economic concepts in the study of both Macro and Microeconomics. There is extensive graphing interpretation and analysis of modern economic policy. Multiple simulations will take place during the year to experience economic concepts at work. A strong background in math is necessary. This course offers the possibility of up to 6 college credits due to two AP Exams being offered.

**Career Preparation:** Economist, Entrepreneur, Financial Advisor, Business Management and Administration, Stoke Broker, Market Analyst, Trade Representative, Banking, Accounting

## COURSE DESCRIPTIONS MATHEMATICS COURSES OFFERINGS

Recommended Sequences: Students must successfully complete 3 credits of mathematics, over a minimum of three years. The math team facilitators, teachers, counselor, and administrators are available to help students with their placement. Students are permitted to take some courses concurrently, with teacher approval. For example, students may enroll in Algebra II and Geometry simultaneously. **-All course advancements must be approved by and have the signature of the current math teacher on the course selection sheet.**

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	Algebra I	Geometry	Algebra II	
	Honors Geometry	Honors Algebra II Honors Geometry	Algebra III & Trigonometry Honors Pre-Calculus / Trigonometry CIHS/ AP Statistics	College Algebra Honors Calculus AP Calculus AB
Electives	Computer Science HN AP Computer Science Principles	Computer Science HN CIHS/AP Computer Science AP Computer Science Principles	Fundamentals of Algebra and Geometry Computer Science HN CIHS/AP Computer Science AP Computer Science Principles	Fundamentals of Algebra and Geometry Computer Science HN CIHS/AP Computer Science AP Computer Science Principles

### 0302 ALGEBRA I

Grade: (9)  
Credit 1.0

**RECOMMENDED PREREQUISITE:** None

The course includes algebraic symbolism and terminology, real number operations, solving equations and inequalities, linear functions, systems of equations & inequalities, exponents & polynomials, factoring polynomials, quadratic functions and equations, and data analysis and probability.

**Career Preparation:** actuaries, air traffic controllers, architects, computer engineers and analysts, economists, market research analysts, dietitians and nutritionists, engineers, foresters and conservation scientists, geologists, jewelers, meteorologists, morticians, oceanographers, ophthalmic laboratory technicians, purchasers and social scientists.

## 0304 ALGEBRA II

*Grade: (10-11)*  
*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Successful completion of Geometry or Geometry (Honors)

The course includes a review of Algebra I, functions, linear relationships, polynomials, systems of equations, special products and factoring, matrices, linear graphing, exponents and their properties, radicals, quadratic equations, and fractional equations.

**Career Preparation:** accounting, computer programming, business intelligence analytics, financial analyst, pharmacist, supply chain manager, auditor, epidemiology, management analyst and engineering.

## 0305 HONORS ALGEBRA II

*Grade: (10-11)*  
*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 80% or better in Geometry (Honors) or 90% or better in Geometry and a 90% or better in Algebra 1 and a score of Proficient or Advanced on the Keystone Exam.

The course consists of equations and inequalities, linear equations and functions, linear systems and matrices, quadratic functions and factoring, polynomials and polynomial functions, rational exponents and radical functions, exponential and logarithmic functions, rational functions and data analysis and statistics. Theories as well as applications of the above topics are also examined.

**Career Preparation:** accounting, computer programming, business intelligence analytics, financial analyst, pharmacist, supply chain manager, auditor, epidemiology, management analyst and engineering.

## 0307 GEOMETRY

*Grade: (9-12)*  
*Credit 1.0*

**RECOMMENDED PREREQUISITE:** Successful completion of Algebra I

This algebra-based course focuses on the study of fundamental geometric concepts with the continuation of algebra skills throughout. Students will learn fundamental terms, formal proofs, parallel lines, congruent triangles, polygons, quadrilaterals, right triangles, trigonometric ratios, circles, area, perimeter, and volume. Ninth graders who have passed the Algebra I Keystone may also take this course.

**Career Preparation:** art, architecture, engineering, robotics, astronomy, sports, mechanics, education, construction, interior design, plumbing, animation, cartography, fashion design, urban planning, game developer, and surveyor.

## 0308 HONORS GEOMETRY

*Grade: (9-10)*  
*Credit 1.0*



**RECOMMENDED PREREQUISITE:** 90% or better in 8<sup>th</sup> grade Accelerated Algebra I or 90% or better in Algebra I.

This algebra-based course focuses on the study of fundamental geometric concepts with the continuation of algebra skills throughout. Students will learn fundamental terms, formal proofs, parallel lines, congruent triangles, polygons, quadrilaterals, right triangles, trigonometric ratios, circles, area, perimeter, and volume.

**Career Preparation:** art, architecture, engineering, robotics, astronomy, sports, mechanics, education, construction, interior design, plumbing, animation, cartography, fashion design, urban planning, game developer, and surveyor.

### 0309 ALGEBRA III / TRIGONOMETRY

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 70% or better in Algebra II and Geometry or 65% or better in Algebra II (Honors).

This course will allow students to continue to study algebraic functions, equations, inequalities, mathematical modeling, functions and their graphs. Students will be introduced to topics on trigonometric functions and analytical trigonometry and logarithms. Students will also be introduced to a graphing calculator and how it is used for some of these topics. Written assignments, tests and quizzes, and a notebook are the basis for the student's grade.

**Career Preparation:** actuaries, air traffic controllers, architects, computer engineers and analysts, economists, market research analysts, dietitians and nutritionists, engineers, foresters and conservation scientists, geologists, jewelers, meteorologists, morticians, oceanographers, ophthalmic laboratory technicians, purchasers and social scientists.

### 0310 HONORS PRE-CALCULUS / TRIGONOMETRY

*Grade: (11-12)*

*Credit 1.0*

**RECOMMENDED PREREQUISITE:** 85% or better in Algebra II (Honors)

This course provides a structured entry to advanced studies while building on concepts learned in previous high school math courses. This course builds upon students' understanding of various aspects of functions and expands their knowledge of trigonometric functions, all while helping them make connections between geometry and algebra. The course includes analyzing quadratic, polynomial, and transcendental functions; analytic geometry; inequalities in one and two variables; and sequence and series, trigonometric functions, and analytical trigonometry. Written assignments, tests and quizzes, and a notebook are required and the basis for the student's grade.

**Career Preparation:** STEM (science/technology/engineering/math) careers, aerospace engineer, mathematician, software developer, postsecondary teacher, economist, chemical engineer, research analyst, electrical engineer, environmental engineer, and scientist.

### FUNDAMENTALS OF ALGEBRA AND GEOMETRY

*Grade: 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE: None**

This course is opened to students who would like to continue learning algebra and/or geometry and wish to have a fourth year of mathematics. This course will continue the development and understanding of the skills and concepts presented in

Algebra I and Geometry. Some of these concepts include: operations on integers and absolute value, order of operations, exponents, factoring, angles and angle measures, The Pythagorean Theorem, congruence and similarity, circles, functions, and equations.

**Career Preparation:** plumbing, electrical, masonry, construction, metal workers, etc.), as well as careers in air traffic control, finance, engineering, animation, map making, market research, and urban planning.

This course is not an NCAA approved course.

### 0312 COLLEGE ALGEBRA

*Grades: (12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 70% or better in Trigonometry & Algebra III or 65% or better in Precalculus.

This course will allow students to take a more in-depth look at algebraic functions, equations and inequalities, coordinates and graphs, functions, polynomial and rational functions, exponential and logarithmic functions, analytic geometry, trigonometric functions of angles and real numbers and analytic trigonometry as well as uses of a graphing calculator in these instances.

**Career Preparation:** Actuaries, air traffic controllers, architects, computer engineers and analysts, economists, market research analysts, dietitians and nutritionists, engineers, foresters and conservation scientists, geologists, jewelers, meteorologists, morticians, oceanographers, ophthalmic laboratory technicians, purchasers and social scientists.

### 0313 HONORS CALCULUS

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 85% or better in Pre-Calculus (Honors) or 95% or better in Trigonometry & Algebra III

The course consists of analytic Geometry functions, limits, derivatives, derivative applications, integrals, and integration applications. It is suggested, though not required, that the students take Physics either before or concurrently with Honors Calculus, as an understanding of concepts such as motion (position, velocity, and acceleration) will help students visualize calculus concepts. A graphing calculator will be provided.

**Career Preparation:** actuaries, architects, computer engineers and analysts, economists, mathematicians, engineers, cryptographers, financial planners, math teachers, animators, auditors, physicists, data scientists, insurance underwriters, medical scientists, financial analysts and astronomers.

### 0314 PROBABILITY AND STATISTICS CIHS/AP

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 85% or better in Algebra II (Honors) or 95% or better in Algebra 2 (College Prep) AND Trigonometry/Algebra III (College Prep). The course includes an exploration of data analysis, statistics, and probability. Students in this course will become informed, critical users of data who can apply them meaningfully in their everyday lives. The students will transform data to aid in data interpretation and prediction, test hypotheses using appropriate statistics, and probability distributions. Written assignments, projects, and tests are required and are the basis for a student's grade. Knowledge in statistics provides you with the necessary tools and conceptual foundations in quantitative reasoning to extract information intelligently from this sea of data. From medical studies to research experiments, from satellites continuously orbiting the globe to social

network sites like Facebook or LinkedIn, from polling organizations to United Nations observers, data are being collected everywhere and all the time.

**Career Preparation:** statistician, data scientist, data analyst, sports analyst, financial analyst, marketing research analyst, biostatistician, computer scientist, operations research analyst, data engineer, insurance actuary, scientific researcher, and database administrator.

### 0315 ADVANCED PLACEMENT CALCULUS AB

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 90% or better in Pre-Calculus (Honors)

The course consists of analytic geometry, algebraic functions, limits, derivatives, differential applications, integration, integral applications, and transcendental functions and parametric, vector and polar function. Problems will be solved graphically, numerically and algebraically. It is suggested, though not required, that the student take Physics either before or concurrently with AP Calculus AB, as an understanding of concepts such as motion (position, velocity, and acceleration) will help students visualize calculus concepts. A graphing calculator will be provided.

**Career Preparation:** actuaries, architects, computer engineers and analysts, economists, mathematicians, engineers, cryptographers, financial planners, math teachers, animators, auditors, physicists, data scientists, insurance underwriters, medical scientists, financial analysts and astronomers.

### 0317 COMPUTER SCIENCE (HONORS) - INTRODUCTION TO JAVA PROGRAMMING

*Grade: (9-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 80% or better in Algebra I

This is a full year introductory course in Computer Science open to students in grades 10, 11, and 12. Students will begin studying the foundations of computer programming and basic programming in Java with an emphasis on helping students develop logical thinking and problem-solving skills. This course will also give students an understanding of advanced programming concepts using the object-oriented programming language Java. Topics include: Built-in and user defined data types, objects classes, methods, arrays, inheritance and interfaces.

**Career Preparation:** mathematics, engineering, science or business. Future jobs include information technology, App design, game design, finance, engineering, data analysis, security, project management, and of course web page and software development.

### 0318 COLLEGE IN HIGH SCHOOL / ADVANCED PLACEMENT COMPUTER SCIENCE - (JAVA PROGRAMMING)

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 80% or better in Honors Computer Science

This is a full year course in Computer Science, open to students in grades 11 and 12, in which students will learn the basics of object-oriented programming with a focus on problem solving and algorithm development in the Java language. Upon completion, students will be prepared to take the AP Java Exam.

**Career Preparation:** mathematics, engineering, science or business. Future jobs include information technology, App design, game design, finance, engineering, data analysis, security, project management, and of course web page and software development.

## 0319 ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

*Grade: (9-12)*

*Credit: 1.0*

### **RECOMMENDED PREREQUISITE:** None

This course introduces students to the foundational concepts of computer science and explores the impact computing and technology have on our society. With a unique focus on creative problem solving and real-world applications, the CodeHS AP Computer Science Principles course gives students the opportunity to explore several important topics of computing using their own ideas and creativity, use the power of computing to create artifacts of personal value, and develop an interest in computer science that will foster further endeavors in the field.

**Career Preparation:** mathematics, engineering, science or business. Future jobs include information technology, App design, game design, finance, engineering, data analysis, security, project management, and of course web page and software development.

## SCIENCE COURSES OFFERINGS

Required Course Offerings: Students must successfully complete 3 credits of science to graduate. All students are required to take Biology. It is highly recommended that students also select a Chemistry and Physics course during high school. Students are permitted to take some courses concurrently. Students who meet the criteria for AP level classes may elect to take those. Below is the recommended courses sequence by grade.

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	<p><b>Biology / Environmental Science</b></p> <p><b>Honors Biology</b></p>	<p><b>Biology</b></p> <p><b>Chemistry in the Community</b></p> <p><b>Chemistry</b></p> <p><b>Honors Chemistry</b></p> <p><b>AP Biology</b></p>	<p><b>Physical Science Earth &amp; Space</b></p> <p><b>Honors Physics</b></p> <p><b>AP Chemistry</b></p> <p><b>AP Biology</b></p>	<p><b>AP Biology</b></p> <p><b>AP Chemistry</b></p> <p><b>AP Physics</b></p> <p><b>Honors Physics</b></p>
Electives			<p><b>Honors Anatomy &amp; Physiology</b></p> <p><b>Honors Astronomy</b></p> <p><b>Meteorology</b></p>	<p><b>Honors Anatomy &amp; Physiology</b></p> <p><b>Honors Astronomy</b></p> <p><b>Meteorology</b></p> <p><b>Physical Science Earth &amp; Space</b></p>

### 0401 ENVIRONMENTAL SCIENCE

Grade: (9)  
Credit 0.5

**RECOMMENDED PREREQUISITE:** None

This course is required of all ninth grade students not enrolled in Biology (Honors). This course will include introductory concepts in Ecology and will explore basic lab skills, the use of lab equipment, data analysis and the principles of measurement.

**Career Preparation:** chef, landscaper, home health aid, optician, personal trainer, respiratory therapist, pharmacy technician, patient care technician, and veterinary technician.

## 0403 BIOLOGY

*Grade: (10) (9 with Environmental Science concurrently)*

*Credit 1.0*

**RECOMMENDED PREREQUISITE:** For 10<sup>th</sup> grade students, successful completion of Environmental Science (80% in 8th grade science to take in 9th grade)

The major concepts of biology which are cell and cell processes and unity and continuity of life will be covered using a combination of laboratory exercises and lecture discussions. The course is designed for students in both college bound as well as general education programs. Students are expected to take the Keystone Exam at the end of the course.

**Career Preparation:** teacher, nurse, radiologist, home health aid, optician, personal trainer,, respiratory therapist, pharmacy technician, patient care technician, and veterinary technician.

## 0404 HONORS BIOLOGY

*Grade: (9) (10 with Environmental Science teacher recommendation)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 90% or better in 8<sup>th</sup> grade science (Environmental Science teacher recommendation)

This course includes topics in biochemistry, cell structure and function, genetics and evolution, interdependence of organisms, ecology, and organization of living organisms and systems. Students are exposed to advanced laboratory methods and experiments. This course is designed for students interested in scientifically related careers. Students will be expected to take chemistry and physics as sophomores and juniors. Students are expected to take the Keystone Exam at the end of the course.

**Career Preparation:** nurse, veterinarian, senior scientist, dentist, forensic scientist, physician assistant, science writer, zoologist, soil scientist, marine biologist, health educator, clinical scientist in genomics, pharmacologist, physical therapist, or lab technician

## 0405 CHEMISTRY IN THE COMMUNITY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Biology 70% and Algebra 1 70%

This course introduces students to basic chemistry concepts through society-oriented topics. Topics include: water quality, air quality, energy sources, resources, nuclear energy and consumer goods. Students learn chemistry by connecting concepts to real-world experiences. Laboratory work and mathematics are minimized but still needed. The course is intended for students who may not be planning on a college career or planning on attending college for a non-science degree. This course does not fulfill the prerequisite requirements for Physics or Advanced Placement Chemistry.

**Career Preparation:** water quality analyst, chemical sales representative, pest control technician, medical laboratory technician, and crime lab assistant.

## 0406 CHEMISTRY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 65% or better in Biology (Honors) or 75% or better in Biology and 75% or better in Algebra I



This is a course that meets 7 periods per week. This is a college-oriented course aimed at meeting the needs of those students having an aptitude in science or related fields. The investigative approach to chemical concepts is stressed. The students develop ideas through interpretation of experimental evidence. Since quantitative observations are stressed, a solid background in Algebra is necessary to be successful. Students planning on advancing to AP Chemistry should plan on retaining their notebook as a reference.

**Career Preparation:** nurse, water quality analyst, chemical sales representative, pest control technician, pharmacist, food scientist, medical laboratory technician, industrial chemist, crime lab assistant, and chemical safety officer.

## 0407 HONORS CHEMISTRY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 80% or better in Biology (Honors) or 90% or better in Biology and Algebra I

This course meets 7 periods per week. This is a college-oriented course aimed at meeting the needs of those students having an aptitude in science or related fields. The investigative approach to chemical concepts is stressed. The students develop ideas through interpretation of experimental evidence. This course stresses the more quantitative aspects of chemistry and a very solid mathematics background in Algebra is essential. This course will cover all aspects of Chemistry but at a faster pace to include additional topics and greater detail on other topics. Limiting reactants, reaction prediction, equilibrium applications, chemical kinetics, and molecular geometry will be discussed in greater detail. Additional topics include acid-base chemistry, oxidation-reduction reactions, entropy, and free energy. Students planning on advancing to AP Chemistry should plan on retaining their notebook as a reference.

**Career Preparation:** engineer, water quality analyst, chemical sales representative, pest control technician, pharmacist, food scientist, medical laboratory technician, industrial chemist, crime lab assistant, and chemical safety officer.

## 0408 PHYSICAL SCIENCE

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 65% or better in any Biology course

This is a course that meets 5 periods per week. This course is for 11<sup>th</sup> and 12<sup>th</sup> graders who have passed Environmental Science and any Biology course. Students will explore the fascinating world of Physical Science, which is the study of matter and energy. Physical Science is a combination of two branches of science – Chemistry and Physics. Chemistry is the study of the properties, composition, structure, and interactions of matter. Physics is the study of the relationship between matter and energy. Overall, this course will focus mainly on exploring and understanding the relationships as they relate to the world in which we live. Students will gain an understanding of how the principles of Physical Science are used in practical, real-world applications. Scientific inquiry and laboratory principles will be utilized to strengthen student understanding.

**Career Preparation:** carpenter, electrician, plumber, HVAC technician, respiratory therapist, patient care technician, veterinary technician

## 0409 EARTH SPACE SCIENCE

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 65% or better in Biology or 85% or better in Biology

This course is open to students in grades 11 and 12. The course is intended for students who may or may not be planning on attending college. Basic disciplines of earth and space science are explored including geology, oceanography, and astronomy. Students will study the land, water, and atmospheric characteristics of our earth and what influences changes in these characteristics.

**Career Preparation:** Agriculture, Environmental Lawyer, Economic Geologist, Archaeologist, Zoologist, Earth Scientist, Game Warden, Professor, Geologic Mapping, Geochemist, Forester, Volcanologist, Meteorologist, Seismologist, Hydro-Electrical Engineer, Soil Scientist, Oceanography, Mineralogy.

## 0410 HONORS PHYSICS

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 80% or better in Chemistry (Honors) or 85% or better in Chemistry **and** 80% or better in Honors Algebra II or 85% or better in Algebra II

A course for 11<sup>th</sup> or 12<sup>th</sup> graders. Students must have some experience with trigonometry or be taking a math course with trigonometry concurrently. A study of energy and its various forms including classical mechanics, light and optics, heat and thermodynamics, waves, sound, and electricity. Although concepts are emphasized, experience, skill and comfort with mathematics and problem solving is needed to be successful.

**Career Preparation:** all fields of engineering, Data Scientist/Analysis, Research Scientist, AstroPhysics, Medical Physicist, Educator.

## 0411 HONORS ASTRONOMY

*Grade: (11-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** 70% or better in Chemistry (Honors) or 85% or better in Chemistry and 70% or better in Honors Algebra II or 85% or better in Algebra II

Astronomy is a one semester course that meets five times per week and is open to 11<sup>th</sup> and 12<sup>th</sup> grade students. It is an introductory lecture/investigative course dealing primarily with objects beyond the solar system, although our stellar system will be discussed. The course briefly examines the historical development of astronomy, telescopes and spectroscopy. The major topics covered are the birth and death of stars, the structure and evolution of galaxies, exotic objects such as pulsars, white dwarfs, black holes, radio galaxies, quasars and some of the current theories of cosmology as well as space flight.

**Career Preparation:** Astronaut, Aerospace, Engineer, Space Tourism, Astrobiologist, NASA, Astronomer, Research Scientist, College Professor, Space Agriculture, Planetary Scientist, Astrophysicists.

## 0412 METEOROLOGY

*Grade: (11-12)*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** 75% or better in Chemistry and Algebra II

Meteorology is a single semester course, open to 11 and 12 grade, that provides an overview of current weather maps; structure of the atmosphere and the role of moisture in the development of dew, clouds and precipitation; air masses, fronts, cyclones, thunderstorms, tornadoes and hurricanes. Elements of weather forecasting, instrumentation and communication are explored.

**Career Preparation:** Data scientist, Atmospheric Scientist, Forensic Meteorologist, Climatologist, Broadcast Meteorology, Environmental Scientist, Geophysicist, Air Pollution Scientist, Hydrologist, Aviation Meteorologist.

### 0413 ADVANCED PLACEMENT BIOLOGY

*Grade: (10-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 85% or better in Chemistry (Honors) or 90% or better in Chemistry or 85% or better in Biology Honors or 90% or better in Biology. Students taking AP Biology the year following their first biology must take Chemistry (Honors) concurrently.

AP Biology meets eight periods per week. This course is open to sophomores, juniors and seniors. The AP Chemistry curriculum follows recommendations from and is approved by the College Board in accordance with national Advanced Placement standards. This course is equivalent to a freshman college Biology course and is designed for students intending on entering a life science field in college. This course includes the study of biochemistry, cell structure and function, cell division, genetics, the six kingdoms and ecology. Inquiry-based investigations will be emphasized for this course. Students will develop and use biology knowledge by applying it to the practice of science inquiry. Students satisfactorily completing this course are expected to take the Advanced Placement Test for college credit in May.

**Career Preparation:** Physician, Physician Assistant, Dentist, Teacher, nurse, veterinarian, senior scientist, dentist, forensic scientist, physician assistant, science writer, zoologist, soil scientist, marine biologist, health educator, clinical scientist in genomics, pharmacologist, physical therapist, or lab technician

### 0414 ADVANCED PLACEMENT CHEMISTRY

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 85% in Chemistry (Honors) or 90% in Chemistry

AP Chemistry meets 8 periods per week. The AP Chemistry curriculum follows recommendations from and is approved by the College Board in accordance with national Advanced Placement standards. This course is equivalent to a semester of college General Chemistry and is designed for students intending on entering a science field such as chemistry, medicine, engineering or other related fields. Detailed discussion in the areas of chemical equilibrium, states of matter, energy, reaction rates, nuclear science, bonding, acids and bases, electrochemistry and atomic structure are stressed. Emphasis is placed on improving students' laboratory techniques and interpretation of laboratory results. Inquiry-based investigations will be emphasized for this course. Students will develop and use chemistry knowledge by applying it to the practice of science inquiry. Students satisfactorily completing this course are expected to take an advanced placement test for college credit.

**Career Preparation:** water quality analyst, chemical sales representative, pest control technician, pharmacist, food scientist, medical laboratory technician, industrial chemist, crime lab assistant, and chemical safety officer.

### 0415 ADVANCED PLACEMENT PHYSICS 1

*Grade: (11-12)*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 85% or better in Honors Physics (Honors) and 85% or better in Algebra II Honors and must take Pre-Calculus as a concurrent math course

AP Physics meets 8 periods per week. The AP Physics curriculum follows recommendations from and is approved by the College Board in accordance with national Advanced Placement standards. This course is equivalent to a semester of college Trigonometry/Algebra Based Physics and is designed for students intending on entering a science field such as physics or engineering or a STEM related field. This course includes topics in both classical and modern physics. The content covered in this course will be Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound; and an introduction to electric circuits. Knowledge of Algebra and Trigonometry is required for the course. Inquiry-based investigations will be emphasized for this course. Students will develop and use physics knowledge by applying it to the practice of science inquiry. Students satisfactorily completing this course are expected to take an advanced placement test for college credit.

**Career Preparation:** all fields of engineering, Data Scientist/Analysis, Research Scientist, AstroPhysics, Medical Physicist, Educator.

**0416 HONORS ANATOMY AND PHYSIOLOGY**

Grade: (11-12)  
Credit: 1.0

**RECOMMENDED PREREQUISITE:** 80% in Chemistry (Honors) or 90% in Chemistry and 80% in Biology (Honors) or 90% in Biology

Anatomy and Physiology meets five times per week and is open to 11<sup>th</sup> and 12<sup>th</sup> grade students. This course is designed for students who plan to pursue careers in healthcare, athletics, or science-related fields. The course will introduce students to medical and anatomical terminology, and stress the correlation between structure and function within the human body. All major body systems will be covered, with an emphasis on laboratory investigations, including dissections.

**Career Preparation:** medical laboratory technician, physical therapist, personal trainer, nurse, MRI technologist, biomedical engineer, and physician.

**FOREIGN LANGUAGE DEPARTMENT**

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Electives	<p>Spanish I</p> <p>German I</p>	<p>Spanish I</p> <p>Spanish II</p> <p>German I</p> <p>German II</p>	<p>Spanish I</p> <p>Spanish II</p> <p>Spanish III</p> <p>German I</p> <p>German II</p> <p>German III</p>	<p>Spanish I</p> <p>Spanish II</p> <p>Spanish III</p> <p>Spanish IV</p> <p>German I</p> <p>German II</p> <p>German III</p> <p>German IV</p>

## 0505 SPANISH I

*Grades: 9, 10, 11, 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

You will be introduced to the basic knowledge of Spanish grammar, vocabulary, and culture. The four language skills of listening, speaking, reading and writing are emphasized. Daily class participation, written assignments, oral performances, and projects are required. We will learn through games and hands-on activities as well as traditional learning methods.

**Career Preparation:** Communicate effectively for travel purposes.

## 0506 SPANISH II

*Grades: 10, 11, 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in level I

Continues with the basic study of Spanish grammar, vocabulary and culture. Also continues emphasizing the four language skills of listening, speaking, reading and writing. Grammatical concepts increase in difficulty requiring more study time on part of the student. Students are required to participate in class, develop conversational skills and complete assignments and projects. We will learn through games and hands-on activities as well as traditional learning methods.

**Career Preparation:** Communicate effectively for travel purposes.

## 0507 SPANISH III

*Grades: 11, 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in Level II

A continued study of Spanish grammar, vocabulary and culture. The four language skills of listening, speaking, reading and writing are again emphasized. Students are required to participate in class, develop conversational performance skills, write paragraphs in Spanish, complete all assignments and projects and read selected stories in Spanish. We will continue to use games and hands-on activities to help you learn.

**Career Preparation:** Business, Education, International Relations, Political Science, Diplomatic Relations, Hospitality, Linguistics, Engineering or anything you might want to be.

## 0508 SPANISH IV

*Grade: 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in level III

A more in-depth study, on an advanced level, of Spanish grammar, vocabulary and culture. The four language skills of listening, speaking, reading and writing continue to be emphasized. Students are required to participate in class, write short compositions,

continue to develop conversational performance skills, read and discuss short stories and complete oral and written projects in Spanish. **Preparation for a language placement at an upper level.**

**Career Preparation:** Business, Education, International Relations, Political Science, Diplomatic Relations, Hospitality, Linguistics, Engineering or anything you might want to be.

### 0509 GERMAN I

*Grades: 9,10, 11,12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** None

You will be introduced to the basic knowledge of German grammar, vocabulary, and culture. The four language skills of listening, speaking, reading and writing are emphasized. Daily class participation, written assignments, oral performances, and projects are required. We will learn through games and hands-on activities as well as traditional learning methods.

**Career Preparation:** Communicate effectively for travel purposes.

### 0510 GERMAN II

*Grades: 9, 10, 11, 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in level I

Continues with the basic study of German grammar, vocabulary and culture. Also continues emphasizing the four language skills of listening, speaking, reading and writing. Grammatical concepts increase in difficulty requiring more study time on part of the student. Students are required to participate in class, develop conversational skills and complete assignments and projects. We will learn through games and hands-on activities as well as traditional learning methods.

**Career Preparation:** Communicate effectively for travel purposes.

### 0511 GERMAN III

*Grades: 10, 11,12*

*Credit 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in Level II

A continued study of German grammar, vocabulary and culture. The four language skills of listening, speaking, reading and writing are again emphasized. Students are required to participate in class, develop conversational performance skills, write paragraphs in German, complete all assignments and projects and read selected stories in German. We will continue to use games and hands-on activities to help you learn.

**Career Preparation:** Business, Education, International Relations, Political Science, Diplomatic Relations, Hospitality, Linguistics, Engineering or anything you might want to be.



## 0512 GERMAN IV

*Grades: 11, 12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITES:** 70% or better in Level III

A more in-depth study, on an advanced level, of German grammar, vocabulary and culture. The four language skills of listening, speaking, reading and writing continue to be emphasized. Students are required to participate in class, write short compositions, continue to develop conversational performance skills, read and discuss short stories and complete oral and written projects in German. **Preparation for a language placement at an upper level.**

**Career Preparation:** Business, Education, International Relations, Political Science, Diplomatic Relations, Hospitality, Linguistics, Engineering or anything you might want to be.

**BUSINESS/TECHNOLOGY DEPARTMENT**

	<b>9<sup>th</sup> Grade Options</b>	<b>10<sup>th</sup> Grade Options</b>	<b>11<sup>th</sup> Grade Options</b>	<b>12<sup>th</sup> Grade Options</b>
<b>Required</b>	<b>Computer Applications</b>	<b>N/A</b>	<b>College and Career Preparation</b>	<b>N/A</b>
<b>Electives</b>	<b>Advanced Computer Applications</b>	<b>Advanced Computer Applications</b>	<b>Advanced Computer Applications</b>	<b>Advanced Computer Applications</b>
	<b>App/Web: Principles of Design</b>	<b>App/Web: Principles of Design</b>	<b>App/Web: Principles of Design</b>	<b>App/Web: Principles of Design</b>
	<b>Sales and Marketing</b>	<b>Accounting IA</b>	<b>Management Theory &amp; Practice</b>	<b>Management Theory &amp; Practice</b>
	<b>Intro to Game Design</b>	<b>Accounting IB</b>	<b>Law, Business, and Society</b>	<b>Law, Business, and Society</b>
	<b>Intro to Computer Science</b>	<b>Money Management</b>	<b>Accounting IA</b>	<b>Accounting IA</b>
	<b>AP Computer Science Principles</b>	<b>Sales and Marketing</b>	<b>Accounting IB</b>	<b>Accounting IB</b>
	<b>Advanced Game Design</b>	<b>Intro to Computer Science</b>	<b>Money Management</b>	<b>Money Management</b>
		<b>AP Computer Science Principles</b>	<b>Sales and Marketing</b>	<b>Sales and Marketing</b>
		<b>Advanced Game Design</b>	<b>Intro to Game Design</b>	<b>Financial Accounting</b>
			<b>Intro to Computer Science</b>	<b>Intro to Game Design</b>
			<b>AP Computer Science Principles</b>	<b>Intro to Computer Science</b>
			<b>Advanced Game Design</b>	<b>AP Computer Science Principles</b>
				<b>Advanced Game Design</b>

## 0603 COMPUTER APPLICATIONS

Grade: 9  
Credit: 0.5

**RECOMMENDED PREREQUISITE:** None, Course is a graduation requirement

Computer Applications focuses on valuable computer application and workplace skills that students need to be successful in high school and the professional world. Web tools as well as spreadsheets, word processing and presentation software will be the main applications being taught, centering around topics such as how to create visual representations of data, creating citations for research papers, and communication skills. Mandatory for Grade 9

**Career Preparation:** Data Entry, Administrative Work, and Public Speaking

## 0604 ADVANCED COMPUTER APPLICATIONS

Grades: 9-12  
Credit: 0.5

**RECOMMENDED PREREQUISITE:** Successful completion of the Computer Applications Course

Expand your technology skills for personal, school and college by exploring various modern applications. Delve into the world of Virtual Reality by examining different VR applications and developing your own VR environment. Design and create visual materials for the professional workplace using Web 2.0 Tools such as Canva to efficiently create and publish materials, as well as using data management applications to collect and graph real-world phenomena.

**Career Preparation:** Information Systems, Computer Programmer, and Computer Software Engineering.

## 0605 APP/WEB: PRINCIPLES OF DESIGN

Grades: 9-12  
Credit: 0.5

**RECOMMENDED PREREQUISITE:** None

Learn to build your dream apps and websites using easy to use design applications. Create dynamic, interactive Web pages and apps containing text, images, hyperlinks, animation, sounds, video, and other elements. In-depth projects will be completed to hone your design skills. Explore core design and web concepts that will help with a career in technology and at understanding the digital world we live in. One-semester course for grades 9-12.

**Career Preparation:** Web Development, Game Development and Mobile Applications.

## 0606 MANAGEMENT THEORY & PRACTICE - COLLEGE IN HIGH SCHOOL

Grade: 11-12  
Credit: 1 and 3 College Credits from Robert Morris University (RMU optional college credit for \$250)

**RECOMMENDED PREREQUISITE:** None

This course is the foundation course for management. The course traces the development of management thought and practice from the pre-Industrial Revolution to today. The course presents the shift in management paradigms and legal requirements; the changes in organizational structures; and the evolution of management theories. The goals of the course include helping students integrate theories into a coherent knowledge background for advanced management courses and building a framework for future management practice. College credits awarded to C grade or better.

**Career Preparation:** Human Resource Manager, Operational Manager, Sales Consultant

## 0607 LAW, BUSINESS, AND SOCIETY - COLLEGE IN HIGH SCHOOL

*Grade: 11-12*

*Credit: 1 and 3 College Credits from RMU (optional college credit for \$250)*

**RECOMMENDED PREREQUISITE:** None

This course introduces students to the legal system and the role it plays in the business world, specifically, and society in general. It emphasizes the complexity and interrelationship of legal, social, and ethical issues. Students acquire knowledge and understanding of the legal implications of business transactions. Specific areas studied include the role of government, business ethics, the American legal system, contracts, business torts, debtor-creditor relationships, government regulations of business, business structure, consumer protection, and legal and ethical issues related to the Internet.

**Career Preparation:** Human Resource Manager, Operational Manager, Sales Consultant

## 0608 ACCOUNTING I A

*Grades: 10-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This course is an elective that is recommended for any student who plans to enter college for any type of business major. This course will teach you to record and report a company's financial transactions and financial performance. Online working papers are used which allows you to receive immediate feedback on your work.

**Career Preparation:** Accounting, Marketing, and Entrepreneurship.

## 0609 ACCOUNTING I B

*Grades: 10-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** 70% average in Accounting I

You should take this course if you plan on majoring in business, accounting, management, marketing, advertising, economics or finance in college. You will learn more detailed accounting such as inventory control, depreciation, uncollectible accounts and investing.

**Career Preparation:** Accounting, Marketing, and Entrepreneurship.

## 0610 MONEY MANAGEMENT

*Grades: 10-12*

*Credit: 0.5*

### **RECOMMENDED PREREQUISITE: None**

Discover ways to maximize earning potential, develop strategies for managing money, explore skills for the wise use of credit and gain insight into the different ways of investing. Participate in a real-life simulation of earning, saving, bill paying and balancing a budget while dealing with the unexpected. Learn how insurance can reduce your risk and learn the basics of investing for retirement.

**Career Preparation:** Investing, Banking, and Financial Planner.

## 0613 BUSINESS WORK RELEASE

*Grade: 12*

*Credit: None*

### **RECOMMENDED PREREQUISITE: Approval from Administration**

This is a non-credit option for seniors who will be employed during their senior year. This is designed to allow students to have more time to get on-the-job training and experience through employment. Students will have to complete a work permit and submit proof of employment and will have to submit proof of employment bi-weekly by submitting pay stubs. Transportation to the job site is the responsibility of the student. Permission to leave school for work will be assessed and approved by the school on a per-situation basis.

**Career Preparation:** All career fields

## 0614 SALES AND MARKETING

*Grades: 9-12*

*Credit: 0.5*

### **RECOMMENDED PREREQUISITE: None**

Sales and Marketing is for the serious business student who is planning to pursue a career in entrepreneurship, management, marketing or sales. You will learn about branding, advertising, promotion, selling, product development, pricing and marketing research. Students will also have "hands on" experience in planning a school event and learning how to handle corporate sponsorship, fundraising and promotion.

**Career Preparation:** Advertising, Market Research Analyst, and Public Relations Specialist.

## 0615 FINANCIAL ACCOUNTING – COLLEGE IN HIGH SCHOOL

*Grade: 12*

*Credit: 1 and 3 Transferable College Credits from RMU (optional for \$250)*

### **RECOMMENDED PREREQUISITE: None**

This course is designed for the college bound senior who plans to major in business or for any senior who would like to earn **3 college credits**. The processes of analyzing, journalizing, and posting are covered in-depth, as well as adjusting accounts, preparing financial statements, and completing the accounting cycle.

**Career Preparation:** Auditing, Actuary Science and Financial Consulting

## 0616 COLLEGE AND CAREER PREPARATION

*Grade: 11*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None, Course is a graduation requirement

The purpose of this course is to develop a college and/or a career plan using research and decision-making skills. Students will research education and career information to discover areas of interest and set realistic goals. You will evaluate options for after high school such as going to college, technical/trade school, and/or military. You will spend time evaluating job market information, identifying educational, degree and certification requirements for the career of your choice. You will also navigate the college application process as well as prepare a resume and other career related documents needed to secure a job. In addition, you will create a workable budget based on your chosen career.

**Career Preparation:** Education, Business, Healthcare, Public Service, Military or the Trades

## 0618 INTRO TO GAME DESIGN

*Grades: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Love to play video games? Create games from scratch and play them in Intro to Game Design! This course will introduce you to game development software and provide you with common design concepts, logic, and game theory using Godot 4. This course begins with starter projects and by the end of the course you will have created a working game. This course provides you with the opportunity to advance your development skills through the course materials and delve deeper into design by exploring your preferred gaming style.

**Career Preparation:** Game Development, Software Engineering, or Graphic Design.

## 0619 INTRO TO COMPUTER SCIENCE

*Grades: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Interested in learning computer programming language, but not sure how to begin? Get started with Python in an introductory course to computer science. Python is a beginner-friendly programming language that is widely used in different types of environments from web sites to industry. Learn basic components and terminology of computer programming including number and string variables, conditional logic, string manipulation, functions, loops and more. Then transition to coding your very own programs that you design and engineer. This course will include hands-on exercises that will help you incrementally develop more significant programs where you will learn real-world skills.

**Career Preparation:** Software Engineering, Data Science, Web Development, or Game Design

## 0319 AP COMPUTER SCIENCE PRINCIPLES

*Grades: 9-12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** None

AP Computer Science Principles is an introductory level advanced placement (AP) computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

**Career Preparation:** Software Engineering, Data Science, Web Development, or Game Design

## 0622 ADVANCED GAME DESIGN

*Grades: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Successful completion of Intro to Game Design

This course is designed for students who would like to build on the theories and practices that were learned in Introduction to Game Design and use those to build 2D or 3D games. This course focuses on designing 2D and 3D assets (such as sprites and models) and then programming them into games using Godot. Godot uses a programming language similar to Python that grants the flexibility to develop 2D or 3D games. Advanced Game Design will give a fundamental understanding for the tools used in Indie Game Development.

**Career Preparation:** Game Development, Software Engineering, or Graphic Design.



## FINE ARTS DEPARTMENT

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	N/A	N/A	N/A	N/A
Electives	<b>Concert Band</b> <b>Music Theory I</b> <b>Music Theory II</b> <b>Jazz and Rock History</b> <b>Concert Choir</b> <b>Percussion Ensemble</b> <b>Music Production</b> <b>Theater Arts</b> <b>Digital Animation</b> <b>Digital Photography</b> <b>Broadcasting and Podcasting</b> <b>Video Production</b> <b>Foundations of Art</b>	<b>Concert Band</b> <b>Music Theory I</b> <b>Music Theory II</b> <b>Jazz and Rock History</b> <b>Concert Choir</b> <b>Percussion Ensemble</b> <b>Music Production</b> <b>Theater Arts</b> <b>Digital Animation</b> <b>Digital Photography</b> <b>Broadcasting and Podcasting</b> <b>Video Production</b> <b>Foundations of Art</b> <b>Pottery</b> <b>Drawing and Painting</b>	<b>Concert Band</b> <b>Music Theory I</b> <b>Music Theory II</b> <b>Jazz and Rock History</b> <b>Concert Choir</b> <b>Percussion Ensemble</b> <b>Music Production</b> <b>Theater Arts</b> <b>Digital Animation</b> <b>Digital Photography</b> <b>Broadcasting and Podcasting</b> <b>Video Production</b> <b>Foundations of Art</b> <b>Pottery</b> <b>Drawing and Painting</b>	<b>Concert Band</b> <b>Music Theory I</b> <b>Music Theory II</b> <b>Jazz and Rock History</b> <b>Concert Choir</b> <b>Percussion Ensemble</b> <b>Music Production</b> <b>Theater Arts</b> <b>Digital Animation</b> <b>Digital Photography</b> <b>Broadcasting and Podcasting</b> <b>Video Production</b> <b>Foundations of Art</b> <b>Pottery</b> <b>Drawing and Painting</b>

## 0701 CONCERT BAND

*Grade: 9-12*  
*Credit: 0.5-1.0*

**RECOMMENDED PREREQUISITE:** Audition or prior enrollment in concert band

This course is highly encouraged for instrumentalists who participate in marching band (although marching band is not required). It is designed to develop individual skills on a specific instrument and band ensemble skills. The students will be required to participate in after-school performances as part of their grade.

**Career Preparation:** Music Performance, Music Education, Music Therapy, Music Technology, or any other music major.

## 0702 MUSIC THEORY I

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None. Music reading ability is beneficial.

Students will study basic music theory including clefs, scales, key signatures, intervals, rhythm and harmonies. Learn how to write and harmonize melodies.

**Career Preparation:** Music Performance, Music Education, Music Therapy, Music Technology, or any other music major.

## 0753 MUSIC THEORY II

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Music Theory I or recommendation from teacher

Students will study intermediate music theory including 4-part harmony, modes intervals, rhythm, and ear training. Learn how to write and harmonize melodies in various styles and keys.

**Career Preparation:** Music Performance, Music Education, Music Therapy, Music Technology, or any other music major. The class covers material leading up to a freshman college level music theory course.

## 0704 JAZZ AND ROCK HISTORY

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This is an elective for students in grades 9-12. One semester course outlining the history of jazz from its early development in New Orleans and tracing its development through the twentieth century covering New Orleans style, swing, bebop, west coast, and modern jazz. Rock history will cover beginnings from blues, folk, country-western and how these various styles combined to form Rock. All styles from the 50's through current day will be covered.

**Career Preparation:** Music Performance, Music Business, Jazz Studies, Music Education, Music Technology, or any other music major.

## 0705 CONCERT CHOIR

*Grade: 9-12*  
*Credit: 0.5-1.0*

**RECOMMENDED PREREQUISITE:** None. Prior enrollment in choir is beneficial.

This course is an elective for students in grades 9-12. In concert choir, students will sing multi-part choral music from the classical and popular repertoire. You will learn how to improve your singing voice and work on skills such as balance, blend, diction, breathing and sight-singing. Students will be required to participate in after-school performances as part of their grade.

**Career Preparation:** Music Performance, Music Education, Music Therapy, Music Technology, or any other music major. It would also benefit students interested in a music performing career.

## 0706 PERCUSSION ENSEMBLE

*Grade: 9-12*  
*Credit: 0.5-1.0*

**RECOMMENDED PREREQUISITE:** None. Prior enrollment in Percussion Ensemble or Concert Band is beneficial.

This course is open to percussion students who would otherwise enroll in concert band. It is designed to develop techniques and skills necessary to play percussion instruments, including but not limited to snare drum, mallet instruments, timpani, marching percussion, and other auxiliary percussion instruments. The students will learn concert repertoire to be performed with the concert band, as well as repertoire specific to a percussion ensemble. The students will be required to attend after-school performances as part of their grade, as well as a few daytime rehearsals with the concert band.

**Career Preparation:** Music Performance, Music Education, Music Therapy, Music Technology, or any other music major.

## MUSIC PRODUCTION (NEW CLASS)

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

**Career Preparations:** 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. Study the fundamental principles of producing and engineering music, learn about the music production process, including recording, editing, and mixing. You will gain a greater understanding of the successful marketing techniques used in today's music industry.

## 0714 THEATER ARTS

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Are you interested in acting or stage production? Are you already involved in theater but want to up your game? Then this class is for you! Theater Arts is a semester-long broad overview of many facets of theater including acting, writing, directing, lighting and audio. You will learn how to walk, talk and move on stage as a professional actor would. The class also explores theater technology as well and you will be taught the basics of lighting and audio as well. You'll also learn about the history of theater and Broadway as well as stage terminology and lingo. At the close of the course, you will write your own original play that the class will produce and perform.

**Career Preparation:** theater, film or the media arts, even those interested in the legal profession.

**Semester course which may be repeated for credit.**

## 0716 DIGITAL ANIMATION

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Are you a fan of cartoons and/or anime? Do you want to create your own original content without leaving your own computer desk? Digital Animation is the course for you!

This semester class will cover many facets of animation and the process to create animation techniques as well as original animated content. The course will begin with basic concepts and work through different animation types, such as stop-motion, 2D and character animation, finally finishing with motion graphics and 3D animation. No prior experience or prerequisites are required but patience and imagination are strongly recommended.

**Career Preparation:** creative arts, as well as any media related field as well as public relations and video game design are encouraged to take this course.

**Semester course which may be repeated for credit.**

## 0721 DIGITAL PHOTOGRAPHY

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Are you interested in photography? Want to learn how to up your online presence with eye popping visuals and ideas? This semester course is an overview of the art of not only photography but photo editing as well. In this class will have an opportunity to work with digital Single Lens Reflex Cameras to conceive, compose, edit and exhibit your own unique photographs. In this class you'll also learn how to edit and modify your own original work as well as learn about promotion of your work.

**Career Preparation:** photography, journalism, multimedia presentation, filmmaking and essentially any content creation.

**Semester course which may be repeated for credit.**

## 0729 RADIO BROADCASTING AND PODCASTING

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

If you like to talk and share your opinions and have a passion for pretty much anything at all, this could be the course for you. This semester long class will teach you proper broadcasting techniques, as well as how to compose, edit and produce podcasts. You'll have access to radio broadcast equipment that you will be able to use to create your podcasts as well as access to a radio station. You will then learn how to create and distribute your own polished, professional podcasts.

**Prerequisite: Preparation:** media arts, broadcast journalism (including sportscasting) as well as any facet of the communications field are encouraged to take this course.

**Semester course which may be repeated for credit.**

## 0752 VIDEO PRODUCTION

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

Are you interested in creating video content? This semester course will focus on all aspects of the video creating process. Students will learn how to write, produce, shoot and eventually publish professional-grade content for their own use or broadcast on the school's web channel as well as preparing them for their own content creation. In addition, you will have access to live broadcast gear and facilities. If you possess an interest in content creation, video production, sales, communications, public relations and any career in the mass media should consider taking this course.

**Career Preparation:** media arts including broadcast journalism, video content creation, filmmaking (fictional, documentary) and multimedia production.

**Semester course which may be repeated for credit.**

## 0749 FOUNDATIONS OF ART

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

This is the introductory art course that must be completed before any other art studio class. During this course every student will get the same basic skills and knowledge needed to be successful. They will become acquainted with tools, safety, terminology, equipment and techniques needed for all of our studio art courses. The main focus will encompass learning the elements and principles of art through the mediums of drawing, graphite, charcoal, oil pastel, painting, watercolor and an intro to clay. Students will sample each medium, gaining a basis of knowledge, techniques and processes.

**Career Preparation:** Fine Artist (Painter/Sculptor), Commercial Artist, Graphic Illustrator, Cartoonist, StoryBoard Illustrator, Graphic Designer, Book Illustrator, Architectural Designer, Special Effects Makeup, Tattoo Artist, Mural Artist, Art Educator

## 0750 POTTERY

*Grade: 10-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Foundations of Art

Students will be introduced to the basic methods of hand building (pinch, coil and slab) as well as relief and 3D sculpture techniques. Students will learn the safety and maintenance of a pottery studio during this course. They will also be introduced to the pottery wheel, centering clay and how to make basic forms such as a cup or bowl. Basic glazing techniques will be taught to finish their pottery pieces. Students will develop a digital portfolio. (Pottery 1, 2 & 3 students will be in the same classroom simultaneously.)

Students will build upon skills attained in the Pottery I course by increasing technical skills and creating more intricate forms. They are required to work on the pottery wheel and make more complicated projects such as plates, vases and sets. A majority of this class will be focused on mastering the pottery wheel and the concept of good studio practice and artistic risk taking will be emphasized. More advanced glazing techniques will also be covered. Students will develop a digital portfolio. (Pottery 1, 2 & 3 students will be in the same classroom simultaneously.)

Students will focus on developing much more skilled pottery builds including teapots and sculptures. Students will be encouraged to elaborate further in their own artistic style. They will be able to build pieces that use multiple building methods as well as learn new skills for producing pottery on the wheel. They will be able to use more advanced glazing techniques and will again be looking to gain more individual artistic freedom. Students will develop a digital portfolio. (Pottery 1, 2 & 3 students will be in the same classroom simultaneously.)

**Career Preparation:** Studio or Production Potter, Ceramic Designer, Mosaic Designer, Jeweler, Toy Designer, Industrial Designer

**Semester course which may be repeated for credit.**

## 0751 DRAWING AND PAINTING

*Grade: 10-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Foundations of Art

Students will continue to build a vocabulary of drawing and painting techniques that were started in Foundations of Art using graphite, oil pastel, charcoal, watercolor and acrylic paint. Basic color theory as well as the importance of sketching and planning your artwork will be emphasized. (Advanced Drawing & Painting 1, 2 & 3 students will be in the same classroom simultaneously.)

Students will focus on portraiture, using a grid, figure drawing, perspective, watercolor and acrylic canvas painting. This will be a continuation of Drawing and Painting I and students will further develop skills and techniques in drawing, printmaking and painting. (Advanced Drawing & Painting 1, 2 & 3 students will be in the same classroom simultaneously.)

Students will work more in experimental techniques and focus on further cultivating their drawing and painting skills. They will also be introduced to printmaking processes and techniques. Practice, artistic risk taking and developing personal style will also be emphasized. There will be a focus on portfolio building as well. (Advanced Drawing & Painting 1, 2 & 3 students will be in the same classroom simultaneously.)

**Career Preparation:** Fine Artist (Painter/Sculptor), Commercial Artist, Graphic Illustrator, Cartoonist, StoryBoard Illustrator, Graphic Designer, Book Illustrator, Architectural Designer, Special Effects Makeup, Tattoo Artist, Mural Artist, Art Educator

**Semester course which may be repeated for credit.**

**0815 PARTNERS IN ART THERAPY**

The purpose of Partners in Art Therapy is to provide a diversified program of developmental activities, naturalistic experiences, and vocational opportunities suited to the interests, capacities, and needs of students with disabilities who may benefit from peer support to successfully engage in unrestricted participation of these activities. A PARTNER must exhibit competent leadership and be recommended for the course. Demonstrating a vested interest in special education as either a career or outreach opportunity is suggested.

\*In order to obtain credit towards graduation, participants must enroll in the course as a daily elective. Students interested in volunteering on a part-time basis may join the Circle of Friends Club.

**Career Preparation:** Special Education Teacher, Child Psychologist, Pediatric Nurse, Social Worker, Family Development Specialist, Youth Counselor, Day Care Provider, Childcare Center Director, Reading Specialist, Speech Pathologist and Behavioral Specialist.

**FAMILY AND CONSUMER SCIENCE DEPARTMENT**

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	N/A	N/A	N/A	N/A
Electives	N/A	Culinary Arts	Culinary Arts	Culinary Arts Understanding Children I Understanding Children II

**0722 CULINARY ARTS**

Grade: 10, 11 and 12 (Students are NOT permitted to repeat this course)  
Credit: 0.5

**RECOMMENDED PREREQUISITE:** None



If you enjoy trying new foods and want to learn how to prepare a variety of dishes, then this is the course for you. Not only will you start feeling more confident when preparing foods on your own, but you will also be able to impress your family members and friends with your learned talents. You will be able to share your food products with family and friends, as well as begin cooking for others. Treat them to your foods from class. Students must learn the terminology and basics of meal preparation, food and kitchen safety, reading recipes, proper measuring techniques, as well as, both cooking and baking methods before the cooking labs can begin. Throughout this semester course, students will have 15-18 cooking labs with each week having a different theme each week, such as, baking, sauteing, poultry, breads, pasta, etc. Hands-on activities make this course extremely practical to everyday living, and allow each student to demonstrate personal talents and skills. Group work is a MUST since students will work in groups of five or six members.

**Career Preparation:** Hotel Restaurant Management, Food and Beverage Management, Human Nutrition and Foodservice Management, Food Science, Dietetics, as well as Food, Nutrition & Wellness Studies.

## 0724 UNDERSTANDING CHILDREN I

*Grade: 12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Students MUST have an interest in working with children, be committed to attending school and plan to take Understanding Children II (2nd semester).

This course is broken into the following three parts during the first semester: 1) Understanding the physical, mental, social and emotional development of children ages 3-5 years. 2) Learning how to create theme-based lesson plans geared towards 3-5-year-olds that focus on subject areas at the preschool level. 3) A hands-on preschool practicum program where you will teach theme-based lessons, as well as work one on one with a preschooler each week. Each high school student will be required to create three to four theme-based lesson plans that will be put into action during the preschool practicum.

**Career Preparation:** Teacher, Child Psychologist, Pediatric Nurse, Social Worker, Family Development Specialist, Youth Counselor, Day Care Provider, Childcare Center Director, Reading Specialist, Speech Pathologist and Behavioral Specialist.

## 0725 UNDERSTANDING CHILDREN II

*Grade: 12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Understanding Children I

Students MUST have an interest in working with children, be committed to attending school and have taken Understanding Children I.

In this course, students will apply the theory, teaching techniques, skills and lesson planning learned in Understanding Children I. Students will continue to carry out the roles and responsibilities related to operating and maintaining a preschool center for the duration of the school year. Students will be required to create and teach 4 new theme-based lessons. A preschool graduation will take place at the end of the year and will be organized by the high school classes and myself. This course is recommended for students with a strong interest in working with kids, considering a career in education, daycare or related fields involving children.

**Career Preparation:** Teacher, Child Psychologist, Pediatric Nurse, Social Worker, Family Development Specialist, Youth Counselor, Day Care Provider, Childcare Center Director, Reading Specialist, Speech Pathologist and Behavioral Specialist.

**APPLIED ENGINEERING AND TECHNOLOGY EDUCATION (AET)**

	<b>9<sup>th</sup> Grade Options</b>	<b>10<sup>th</sup> Grade Options</b>	<b>11<sup>th</sup> Grade Options</b>	<b>12<sup>th</sup> Grade Options</b>
<b>Required</b>	N/A	N/A	N/A	N/A
<b>Electives</b>	<b>Intro to Engineering and Design</b>  <b>Intro to Manufacturing and Automation</b>  <b>Intro to Transportation and CNC Programming</b>  <b>Transportation and CNC Programming II</b>  <b>Graphic Communications Technology I</b>  <b>Graphic Communications Technology II</b>  <b>Robotics and Automation</b>  <b>Home Repair and Maintenance</b>	<b>Intro to Engineering and Design</b>  <b>Principles of Engineering</b>  <b>Digital Electronics</b>  <b>Intro to Manufacturing and Automation</b>  <b>Manufacturing Business</b>  <b>Intro to Transportation and CNC Programming</b>  <b>Transportation and CNC Programming II</b>  <b>Graphic Communications Technology I</b>  <b>Graphic Communications Technology II</b>  <b>Graphic Communications Technology III</b>  <b>Robotics and Automation</b>  <b>Home Repair and Maintenance</b>	<b>Intro to Engineering and Design</b>  <b>Principles of Engineering</b>  <b>Digital Electronics</b>  <b>Engineering Design and Development</b>  <b>Intro to Manufacturing and Automation</b>  <b>Manufacturing Business</b>  <b>Intro to Transportation and CNC Programming</b>  <b>Transportation and CNC Programming II</b>  <b>Graphic Communications Technology I</b>  <b>Graphic Communications Technology II</b>  <b>Graphic Communications Technology III</b>  <b>Robotics and Automation</b>  <b>Home Repair and Maintenance</b>	<b>Intro to Engineering and Design</b>  <b>Principles of Engineering</b>  <b>Digital Electronics</b>  <b>Engineering Design and Development</b>  <b>Intro to Manufacturing and Automation</b>  <b>Manufacturing Business</b>  <b>Intro to Transportation and CNC Programming</b>  <b>Transportation and CNC Programming II</b>  <b>Graphic Communications Technology I</b>  <b>Graphic Communications Technology II</b>  <b>Graphic Communications Technology III</b>  <b>Robotics and Automation</b>  <b>Home Repair and Maintenance</b>

## 0730 INTRODUCTION TO ENGINEERING AND DESIGN – PLTW STEP 1 HONORS

*Grade: 9-12*

*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** Students must be enrolled in the concurrent college preparatory math course.

This course utilizes the design process to strengthen your spatial visualization and problem-solving skills. I.E.D. is the first step in the Project Lead the Way Pre-Engineering Pathway offered at the high school. You will work independently and within teams to design hands-on solutions to a variety of problems using sketching and industry standard 3-D design and modeling software. The structured activities and open-ended design projects will help you develop planning, documentation, communication, and other problem-solving skills. You will design and build a: mini projectile launcher, backpack charm, earbud case, protective package, trammel toy, and a functional automaton during the class. Please visit [www.PLTW.org](http://www.PLTW.org) for more information about this great program.

**Career Preparation:** Mechanical, Electrical, Civil, Chemical, Industrial, Engineering Fields. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems.

## 0731 PRINCIPLES OF ENGINEERING–PLTW STEP 2 HONORS

*Grade: 10-12*

*Credit 1.0*

**RECOMMENDED PREREQUISITE:** Introduction to Engineering and Design (Level 1) and Geometry with an 75%

Principles of Engineering, the second course in our Pre-Engineering Pathway, is a hands-on course designed to explore the specialized fields of civil, mechanical, electrical and materials engineering. Students will utilize all aspects of the engineering design process as they are immersed in real world calculations and problem-solving scenarios. Classroom activities are organized to allow students to work in teams and use 21st century tools, software, and production systems in developing and presenting solutions to engineering problems. You will work on various guided activities related to mechanical design, robotic applications, electrical circuits, fluid power, kinematics, statics, renewable energy, transportation, and infrastructure design. This course will be project driven, fast paced and rewarding.

**Career Preparation:** Mechanical, Electrical, Civil, Chemical, Industrial...Engineering Fields. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems.

## 0732 DIGITAL ELECTRONICS – PLTW STEP 3 HONORS

*Grade: 10-12*

*Credit 1.0*

**RECOMMENDED PREREQUISITE:** 75% in Introduction to Engineering and Algebra II completion recommended.

Digital Electronics, the third level course in the PLTW Pathway, is a year-long, one credit course that covers the fundamentals of Electrical Engineering and Computer Science. The topics you will become familiar with include the operation of combinational and sequential logic, Boolean Algebra, circuit design, and microprocessors. You will learn digital theory, test prototypes with interactive circuit design software, and create working models of their circuits with the use of digital logic boards. You will design and build circuits using a circuit design software called MultiSim. From here we will have a working schematic of how to build our circuit. Then we will prototype using breadboards and real-life components to see if it works.

**Career Preparation:** Mechanical, Electrical, Civil, Chemical, Industrial...Engineering Fields. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems. Electrical, Hardware, Software Engineering. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems.

### 0733 ENGINEERING DESIGN AND DEVELOPMENT PLTW STEP 4 HONORS

*Grade: 11-12*  
*Credit: 1.0*

**RECOMMENDED PREREQUISITE:** 75% in Introduction to Engineering and Algebra II completion recommended. Completion of two previous PLTW classes (IED, POE, DE) Preferred.

Engineering Design and Development is a capstone course that will allow you to design a solution to a technical problem of your choosing. This is an inquiry driven course in which you will work in teams to research, design, test and construct a solution to an open-ended engineering problem. These problems can but are not limited to contests that are run throughout the county and the state. The EDD course allows you to apply all of the competencies and knowledge learned in previous Project Lead the Way and Technology Engineering courses. You will engage in teamwork and project management while creating an authentic portfolio for use in post-secondary admissions.

You will have the opportunity to work in the shop to fabricate your products while honing your skills with the shop tools and machines including CNC.

This course is designed for 11th and 12th grade students who have successfully completed two previous PLTW classes.

NOTE: If a student is a returning member of any AET competition team, they may re-enroll in EDD for credit.

**Career Preparation:** Mechanical, Electrical, Civil, Chemical, Industrial...Engineering Fields. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems. Electrical, Hardware, Software Engineering. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems.

**Materials Required:** Students will be responsible for the purchase of all manufacturing and prototyping materials not readily available in the production laboratories to complete their prototype.

### 0735 INTRODUCTION TO MANUFACTURING AND AUTOMATION (LEVEL I - FALL)

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

If you are the type of student that enjoys working in the woodshop, this is the perfect fit for you. This course is the first of a series of experiences that will transform you into one that can create products with your hands as well as some high-tech computerized machinery. Whether you have plans to attend college for a STEM field or if you have your sights set on a skilled trade, the ability to turn raw materials into finished products is limitless. You will utilize Onshape 3D modeling software, CNC machining, measurement, layout techniques and shop machinery to produce accurate parts. Finally, the parts will be assembled into beautiful custom products to take home.

Projects: personalized key hanger, custom thematic clock, and possibly a third if time allows.

**Career Preparation:** Mechanical, Electrical, Civil, Chemical, Industrial...Engineering Fields. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems. Electrical, Hardware, Software Engineering. The skills learned are also transferable to various other fields looking to hire critical thinkers who can solve problems. The Pittsburgh region

has many manufacturing industries looking to fill positions at all levels. They are desperately looking for hands-on students like you to pursue fields such as CADD designers, Computer Numerical Control (CNC) operators, robotics programmers, and welders. Hundreds of well-paying 21st century skilled positions need to be filled at local industries.

**Note:** Students may enroll in Manufacturing Level I and Level II during the same school year.

### 0736 MANUFACTURING PRODUCTION (LEVEL II - SPRING)

*Grade: 9-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** 75% in Introduction to Manufacturing and Automation

Level II is a natural progression from the introductory course where you will get a chance to use all of the shop equipment once again. This time you will have more ownership to the processes the class will follow and products we will make. During the first segment, you will explore product ideas, pick the best one, and refine the design to a working model. Once the product assembly is designed, you will also design the most efficient production steps to create a refined/marketable product. You will then build the parts with mass production techniques, assemble them, and apply a coat of finish to improve the look and protect your take home products. Your class will likely produce several extra products that will be for sale on the Eagle Pride Production website, the site of South Park High School's student-run maker business.

**Career Preparation:** Industrial Engineer, Product Designer, Production Engineer, Quality Control Inspector, Manufacturing Technician, Electro-mechanical Technician, Fabricator, Assembler, CNC Machinist and many more fun hands-on STEM careers.

**Note:** Students may re-enroll in Manufacturing and Automation II for credit as the products and processes are likely to change with each run of the course.

### 0745 MANUFACTURING BUSINESS

*Grade: 10-12*  
*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** This course consists of two positions, business/marketing and also manufacturing. There are no prerequisites for business/marketing. Manufacturing requires students take Introduction to Manufacturing to perform production work.

This is not your typical classroom environment; this is an experience of living the American Dream of running your own business.

#### **#Exciting Announcement- Eagle Pride Production is "hiring"!!!**

If you have ever had the thought of developing and working in your own business, this experience will provide you a chance to do just that. If you decide to be a part of this exciting opportunity, you will assume various roles within your company. These roles will be ideally determined by your own interest. This is a chance to put the skills you have learned to use in a truly real-world application. Can you picture yourself filling one of the following positions? Positions include:

(Makers) Product Designer, Shop Worker, Assembler, Quality Controller, Finisher, Packager/Shipper  
(Advertising/Marketing) Photographer, Graphic Designer, Website Development, Social Media Blogger  
(Business) Accountant, Sales Person, Product Pricer, Raw Material Purchaser, Inventory Specialist

We need students who want to have fun putting their various skills to the test and work diligently to build this company. Your talent may be in graphics, production, accounting, marketing, or photography. Whatever skills you choose to contribute with, It will be important that you actively participate daily within your selected roles as your grade and the company's success will depend on it.

**Career Preparation:** Becoming an entrepreneur and all other positions listed above.

**Products/Projects:** Previously developed products listed on the website will be made and new products driven by current students' interest will be developed. Students will be able to take a product home that they work on. You will likely have the opportunity to attend several events throughout the year to sell your finished products in person. Some events that we have attended in the past include The Handmade Arcade at the David Lawrence Convention Center and the Entre-Ed Showcase at the Pittsburgh Airport.

**Note:** Semester course which may be repeated for credit as products and processes will be unique to each run.

## 0737 INTRODUCTION TO TRANSPORTATION AND CNC PROGRAMMING

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

You will learn and utilize solid modeling software, computer aided manufacturing software, and shop skills to produce a variety of transportation projects. You will study the technical subsystems of transportation to design, produce, test and assess various 2D and 3D transportation models that will compete in classroom competitions. These models will incorporate usage of the Laser Engraver, 3D Printer and other automated machine tools available in the labs, to build competencies and solve technical problems. You should have an interest in strengthening your measurement, 3D visualization, solid modeling/assembly, and general shop fabrication skills.

**Projects completed in the past include:** Boat Hull, CO2 Dragster, Magnetic Levitation Car, Glider, Airplane, Cable Car, Hovercraft

**Career Preparation:** Automotive Engineering, Aerospace Engineering, Mechanical Engineering, Manufacturing Engineer, Automotive Technician, Pilot, and many more STEM related careers.

## 0738 TRANSPORTATION AND CNC PROGRAMMING II

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** Introduction to Transportation & CNC programming with 70% or above.

You will design, build and test a functional remote-controlled vehicle. The RC vehicle project is the culminating transportation activity that requires you to apply the skills learned in the introductory course. RC vehicles will be designed, assembled, and technically drawn using Onshape Solid Modeling. They will be produced using material processing machinery, a laser engraver and computerized milling machines. You will be faced with various design decisions, such as choosing a vehicle body style, frame configuration, propulsion system, gear reduction, materials, fasteners, wheels, and suspension configuration. The course is designed to develop problem solving, fabrication, and assembly skills that will be useful to students looking to enter the S.T.E.M. fields.

**Career Preparation:** Automotive Engineering, Aerospace Engineering, Mechanical Engineering, Manufacturing Engineer, Automotive Technician, Pilot, and many more STEM related careers.

## 0739 GRAPHIC COMMUNICATION TECHNOLOGY I

*Grade: 9-12*

*Credit: 0.5*



**RECOMMENDED PREREQUISITE:** None

Introduction to Graphic Communications Technology also popularly known as the “Sticker-Class” is a one-semester course where you will be exposed to the broad area of graphic design and communications. You will focus on the electronic and physical production of graphic media, raster and vector image manipulations, laser engraved media and vinyl decal production. This is a fast paced, project driven course where you will utilize the Adobe Creative Suite to design, produce and assess portfolio quality assignments where due dates are expected to be met.

NOTE: If a student is unable to schedule the next course in the GCT sequence due to a scheduling conflict they may re-enroll in a previously completed class for credit. Assignments will be altered to accommodate these students.

**Career Preparation:** Graphic Designer, Illustrator, Marketing & Advertising Designer, Packaging Designer , Print & Publication Designer , Web Designer, Multimedia Animator, Apparel graphic designer, Art Director, Creative Designer, Creative Director, Brand Identity Designer, Brand Manager, Design Director, Logo Designer, Layout Artist, Data Visualization & Infographic Design, Interior Spatial Designer, Marketing communications specialist, Marketing Manager, Graphic communications coordinator, Marketing and communications graphic designer.

**0740 GRAPHIC COMMUNICATIONS TECHNOLOGY II**

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE: GRAPHIC COMMUNICATION TECHNOLOGY with 70% or above**

This course is a natural progression in developing advanced techniques in the area of graphic communication technology. You will dive deeper into the study of Graphic Communications by using a variety of new tools and machines within this one-semester course. Projects will incorporate a variety of techniques used in graphic design and communications related fields where deadlines are intended to be met. You will use the Adobe Creative Suite, Epilog laser engraver and the Roland Vinyl Plotters to design, produce and assess industry standard graphic design projects. An Introduction to Screen Printing will begin in this course where you will prep silk screens to screen print onto shirts hoodies, etc. This is a fast paced, project driven course where you will utilize the Adobe Creative Suite to design, produce and assess portfolio quality assignments where due dates are expected to be met.

**Career Preparation:** Graphic Designer, Illustrator, Marketing & Advertising Designer, Packaging Designer , Print & Publication Designer , Web Designer, Multimedia Animator, Apparel graphic designer, Art Director, Creative Designer, Creative Director, Brand Identity Designer, Brand Manager, Design Director, Logo Designer, Layout Artist, Data Visualization & Infographic Design, Interior Spatial Designer, Marketing communications specialist, Marketing Manager, Graphic communications coordinator, Marketing and communications graphic designer.

NOTE: If a student is unable to schedule the next course in the GCT sequence due to a scheduling conflict they may re-enroll in a previously completed class for credit. Assignments will be altered to accommodate these students.

**0744 GRAPHIC COMMUNICATIONS TECHNOLOGY III**

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE: COMPLETION OF GRAPHIC COMMUNICATION TECH I AND II WITH 80% OR ABOVE**

This course is the third step in the Graphic Communication Technology sequence. Its curriculum fully integrates the skills you learned from the IGCT and AGCT courses to produce multimedia projects as assigned from the instructor or school administration. You will be held accountable for efficiency, quality, time-management and marketing and must be competent to



work as independent self-motivated learners. You will use the Adobe Creative Suite, the Epilog laser engraver, Roland Vinyl Plotters, and the Mimaki Vinyl Printer/Plotter to design and produce industry-standard graphic design projects for use by the district, teachers, school sports and school clubs. Students will be assigned tasks as needed by our “clients” and will be responsible for various independent projects and assistance to students in the lower-tier GCT courses.

**Career Preparation:** Graphic Designer, Illustrator, Marketing & Advertising Designer, Packaging Designer , Print & Publication Designer , Web Designer, Multimedia Animator, Apparel graphic designer, Art Director, Creative Designer, Creative Director, Brand Identity Designer, Brand Manager, Design Director, Logo Designer, Layout Artist, Data Visualization & Infographic Design, Interior Spatial Designer, Marketing communications specialist, Marketing Manager, Graphic communications coordinator, Marketing and communications graphic designer.

## 0746 ROBOTICS AND AUTOMATION

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

You will build on your experience from the Middle School Design and Automation courses using the Vex V5 robotics platform to design, construct and program solutions to various real-world design scenarios. Use will be using advanced sensors in the creation of a ChassisBot and a ClawBot to work with autonomous systems and machine programming. You may also be introduced to Arduino microcontrollers, microprocessor architecture and microcomputer systems. Upon completion, you should be able to interpret, breadboard, analyze, verify, and troubleshoot fundamental electronic circuits and programs using appropriate techniques and test equipment.

**Career Preparation:** Robotics Engineer, Manufacturing Engineer, Electromechanical and Robotics Technician, Mechanical Engineer, Design Engineer, Software Engineer, Hardware Engineer, Sales Engineer, Aerospace Engineer, Computer Scientists, User Interface/User Experience (UI/UX) Designer.

## 0747 HOME REPAIR AND MAINTENANCE

*Grade: 9-12*

*Credit: 0.5*

**RECOMMENDED PREREQUISITE:** None

You will experience introductory skilled-trades and home maintenance techniques in the areas of framing, electrical, plumbing, drywall, masonry, and other topics. This course is designed as a fundamental, hands-on experience for future homeowners. You will learn and apply material estimation techniques, project planning skills, and basic hand and power tool operation, as you create small scale construction mockups.

**Career Preparation:** Rough and Finish Carpentry, Electrician, Plumber, Drywall Installer and Finisher, as well as being handy around the house. A penny saved is a penny earned.

## HEALTH & PHYSICAL EDUCATION DEPARTMENT

Students are required to enroll in two semesters of Physical Education classes during their tenure at the high school. To be eligible for graduation, students must pass any of the following two Physical Education courses: General Physical Education; Weight Training; Team Sports; Swimming. In addition to the two Physical Education courses, students are required to take one Online Health course by the end of their sophomore academic year; this is also a graduation requirement.

Note: Students who do not dress and participate in any of the Physical Education Courses more than five times during the second marking period will receive a failing mark of 55% for that grading period and be removed from the course.

	9 <sup>th</sup> Grade Options	10 <sup>th</sup> Grade Options	11 <sup>th</sup> Grade Options	12 <sup>th</sup> Grade Options
Required	N/A	Health	N/A	N/A
Electives	Food and Nutrition	Food and Nutrition	Food and Nutrition	Food and Nutrition
	Swimming	Swimming	Swimming	Swimming
	Physical Education	Physical Education	Physical Education	Physical Education
	Weight Training	Weight Training	Weight Training	Weight Training
		Team Sports	Team Sports	Team Sports

### 0726 FOOD AND NUTRITION

GRADE: 9-12

CREDIT: 0.5

**RECOMMENDED PREREQUISITE:** None

This semester course focuses on learning the fundamentals of a healthy diet and proper nutrition. Students will become familiar with the body's daily needs to maintain optimal health, vitamins, minerals, as well as functions of the body. Students will analyze their own eating habits through diet analysis and self-evaluation to discover best practices for eating options. Food substitutions, unhealthy food ingredients, and traditional foods across different cultures will also be discussed.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

### 0801 SWIMMING

GRADE: 9-12

CREDIT: 0.5

**RECOMMENDED PREREQUISITE:** None

This semester course focuses on developing fundamental swimming skills. Students will learn the following swimming strokes: backstroke, freestyle, elementary backstroke, and breaststroke. Class activities will focus on developing the fundamentals of each stroke, along with daily fitness activities focused on lap swimming. This course includes the same fitness components as the course, 0803 Physical Education. This course can be used more than once as an elective credit.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

**REQUIRED MATERIALS:** All students are required to wear a swimming suit for class each day. Students are also required to obtain their own swimming goggles. Students are responsible for acquiring a lock for their gym locker; locks will not be provided to students.

## 0802 HEALTH (ONLINE)

*GRADE: 10*  
*CREDIT: 0.25*

**RECOMMENDED PREREQUISITE:** None

This quarter length course covers the following topics: bullying-peer pressure, alcohol, drugs, alcohol, non-infectious diseases, body systems, sexually transmitted disease, HIV-AIDS, nutrition, fitness, mental and emotional health, consumer and public health, environmental health. This course is conducted completely online. This course must also be taken by the end of the student's sophomore academic year.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

## 0803 PHYSICAL EDUCATION

*GRADE: 9-12*  
*CREDIT: 0.5*

**RECOMMENDED PREREQUISITE:** None

This semester course focuses on personal fitness. This introductory course teaches the fundamentals of fitness through daily fitness-based activities using body weight exercises, kettlebell exercises, resistance bands, and medicine balls. Individual and group fitness activities are used to improve student's personal fitness. Activities in this course include cardiovascular exercises such as running, etc. This course can be used more than once as an elective credit.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

**REQUIRED MATERIALS:** All students are required to wear athletic clothing and athletic shoes for class. All attire must abide by the student dress code outlined in the district handbook. Students are responsible for acquiring a lock for their gym locker; locks will not be provided to students.

## 0804 WEIGHT TRAINING

*GRADE: 9-12*  
*CREDIT: 0.5*

**RECOMMENDED PREREQUISITE:** None

This semester course teaches students the concepts of weight training for improving personal fitness. Students will learn the fundamentals of primary and secondary lifts, along with supplementary exercises. Students will complete daily fitness activities using barbells, dumbbells, bands, medicine balls, and body weight exercises. Through these exercises students will benefit from a comprehensive weight training program leading to an improvement in strength and aerobic endurance. This course can be used more than once as an elective credit.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

**REQUIRED MATERIALS:** All students are required to wear athletic clothing and athletic shoes for class. All attire must abide by the student dress code outlined in the district handbook. Students are responsible for acquiring a lock for their gym locker; locks will not be provided to students.

## 0806 TEAM SPORTS

*GRADE: 10-12*

*CREDIT: 0.5*

**RECOMMENDED PREREQUISITE:** Enrollment waiver required; not a freshman level course

This semester course is an advanced level physical education class. Students enrolled in this course will participate in competitive games such as but not limited to: basketball, volleyball, soccer, football, handball, NitroBall, speedball, pickleball, gatorball, ultimate frisbee. Through team gameplay students will improve personal fitness, teamwork, and game strategy. This course includes the same fitness components as the course, 0803 Physical Education. This is a competitive course and not considered an entry level physical education class.

**CAREER PREPARATION:** exercise science, nursing, dietetics, sports medicine, personal training, healthcare, etc.

**REQUIRED MATERIALS:** All students are required to wear athletic clothing and athletic shoes for class. All attire must abide by the student dress code outlined in the district handbook. Students are responsible for acquiring a lock for their gym locker; locks will not be provided to students.

## ENGLISH AS A SECOND LANGUAGE

### 0911 ENGLISH AS A SECOND LANGUAGE (ESL)

Students who have recently immigrated into the United States and possess an inadequate background in English may enroll in this course. A tutor will be assigned to meet with the student each week.

## STEEL CENTER FOR CAREER AND TECHNICAL EDUCATION

Students who attend Steel Center can gain a labor market advantage through active learning that meets the expectations of 21<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 (Act), all Postsecondary Institutions receiving funds under the Act are required to award **college-level credit or equivalent clock hours** to a matriculated student and apply that credit toward the completion of the approved Pennsylvania Department of Education (PDE) Program of Study, leading to an industry-recognized credential or certificate **at the postsecondary level, or an associate or baccalaureate degree**. The purpose of this Agreement is to ensure that students make the transition from a school entity (**Steel Center**) to another school entity, college or university or a business/industry without experiencing delays in or duplication of learning. This Agreement sets forth the terms and conditions for the awarding of college-level credit or equivalent clock hours to students who complete the approved PDE Program of Study at a Secondary School so that those students can seamlessly continue their education in a related Program of Study at a Postsecondary Institution. This agreement outlines the general conditions between secondary and postsecondary institutions.

### STEEL CENTER COURSE OFFERINGS

#### 0936-0938 ADVERTISING & DESIGN

*Grades: 10-12*

*CIP Code: 50.0402, 3 credits/year*

**Industry Certifications Available:** Adobe Certified Associate CS6 Photoshop, InDesign, Illustrator, NOCTI Skills Testing Certification

An instructional program in the applied visual arts that prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of printed media. This program includes instruction in concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.

#### 0927-0929 AUTOMOTIVE TECHNOLOGY

*Grades: 10-12*

*CIP Code: 47.0604, 3 credits/year*

**Industry Certifications Available:** Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, NOCTI Skills Testing Certification

An instructional program that prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes instruction in the diagnosis and testing, including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems and drivetrain and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, drive trains, fuel system components and air conditioning and includes the use of technical repair information and the state inspection procedures.

#### 0930-0932 BAKING/PASTRY CHEF

*Grades: 10-12*

*CIP Code: 12.0501, 3 credits/year*

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

Specialized classroom and practical work experiences associated with the preparation of breads, crackers, cakes, pies, pastries and other bakery products for retail distribution, for consumption in a commercial food service establishment or for special functions. Instruction includes making, freezing and handling of 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.

### 0933-0935 BUILDING TRADES MAINTENANCE

*Grades: 10-12*

*CIP Code: 46.0401, 3 credits/year*

**Industry Certifications Available:** NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA), OSHA-10 Hour Training CareerSafe

An instructional program that prepares individuals to apply technical knowledge and skills to 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.

### 0939-0941 CARPENTRY

*Grades: 10-12*

*CIP Code: 46.0201, 3 credits/year*

**Industry Certifications Available:** NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA), OSHA 10 Hour Training CareerSafe

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

### 0924-0926 COLLISION REPAIR AND REFINISHING

*Grades: 10-12*

*CIP Code: 47.0603, 3 credits/year*

**Industry Certifications Available:** S/P2 Collision Safety and Pollution Prevention, NOCTI Skills Testing Certification

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

### 0960-0962 CYBERSECURITY AND NETWORK TECHNOLOGY

*Grades: 10-12*

*CIP Code: 11.0901, 3 credits/year*

**Industry Certifications Available:** A+ Certification, Network+, IT Fundamentals+, Cisco Certified Network Associate, OSHA 10 Hour Training CareerSafe & Pennsylvania Skills Certification

A program that focuses on the design, implementation and management of linked systems of computers, peripherals and associated software to maximize efficiency and productivity, and that prepares the individuals to function as network specialist and managers at various levels. Includes instruction in operating systems and applications; system design and analysis; networking theory and solutions; types of networks; network management and control; network and flow optimization; security; configuring; and troubleshooting.

#### 0945-0947 COSMETOLOGY (TECH PREP ARTICULATION AGREEMENT WITH DOUGLAS EDUCATION CENTER)

*Grades: 10-12*

*CIP Code: 12.0401, 3 credits/year*

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

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

#### 0957-0954 CULINARY ARTS

*Grades: 10-12*

*CIP Code: 12.0508, 3 credits/year*

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

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

#### 0951-0953 ELECTRICAL CONSTRUCTION

*Grades: 10-12*

*CIP Code: 46.0399, 3 credit/year*

**Industry Certifications Available:** NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA)

An instructional program that prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program.



## 0963-0965 HEALTH ASSISTANTS

*Grades: 10-12*

*CIP Code: 51.0899, 3 credits/year*

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

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

## 0966-0968 HEATING, AIR CONDITIONING & REFRIGERATION

*Grades: 10-12*

*CIP Code: 47.0201, 3 credits/year*

**Industry Certifications Available:** EPA 608 Technician Certification, NOCTI Skills Testing Certification, Pennsylvania Builders Association Certification (PBA)

An instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in the 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.

## 0978-0980 PUBLIC SAFETY

*Grades: 10-12*

*CIP Code: 43.9999, 3 credits/year*

**Industry Certifications Available:** Emergency Medication Technician, National Incident Management System, Basic Life Support Health Care Providers, Hazardous Materials Response Awareness, NOCTI Skills Testing Certification

A program that prepares individuals, under the remote supervision of physicians, to recognize, assess and manage medical emergencies in prehospital setting 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 the 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.

## 0982-0984 WELDING

Grades 10-12

CIP Code: 48.0508, 3 credits/year

**Industry Certifications Available:** NOCTI Skills Testing Certification, SP/2 Welding Safety Pollution and Prevention

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.

## 0910-0913 VETERINARY ASSISTANT

Grades: 10-12

CIP Code: 51.0808, 3 credits/year

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

An instructional program that prepares individuals to support veterinarians by providing assistance during animal examinations, treatment administration and monitoring; by keeping animal and related health record information; and by performing a range of selected practice-related duties. This program is designed to provide instruction in preparing the animal for examination and treatment, sterilizing equipment and performing selected routine laboratory procedures under direct supervision of the veterinarian. Instruction also includes maintaining medical and business records, charting and scheduling activities and a wide range of 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.

## 0914-0916 EXERCISE SCIENCE AND REHABILITATION SERVICES

Grades: 10-12

CIP Code: 51.2604, 3 credits/year

**Industry Certifications Available:** To be determined, but may include the following: American Heart Association (AHA) Heartsaver First Aid, AHA CPR, HIPAA Certification, American Medication Certification Association (AMCA) Physical Therapy Aide, & Pennsylvania Skills Certification

A program that prepares individuals to assist in rehabilitation services under the supervision of physical therapists, occupational therapists, speech-language pathologists, and other therapeutic professionals, and to perform routine functions in support of rehabilitation. Includes instruction in the roles and responsibilities of rehabilitation providers, basic function of the human body, disabling conditions, therapeutic skills, client management, and communication skills.

## 0917-0919 MEDICAL PROFESSIONS

Grades: 10-12

CIP Code: 51.9999, 3 credits/year

**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.