

Smethport Area Junior-Senior High School



Course Selection Guide 2022-2023

Policy Statement	2
Credit Requirements-	3
Career Education, Community Service, Job Shadowing	3
Graduation Requirements	4
Course Grading	4
GPA Calculations	4
Class Rank	4
Programs of Study	5
Course Availability Statement/Course Drop Procedure	6
Career Cursing	6
College Courses	7
Post-Secondary Education/Admission Requirements	7
Glossary	7
NCAA Requirements	8
Programs of Study- Four Year Plans	11
Course Descriptions	11
Art	12
Electives	13
Business	13
Driver Education	14
English	14
Health Education	15
Physical	15
Personalized Fitness- Grades 10,11 and 12	16
Languages	16
Mathematics	17
Music	19
Science	20
Social Studies	22

Technology Education	23
Seneca Highlands Career and Technical Center	25
Useful Links	32
My Four Year Plan	31
Graduation Pathways	34

POLICY STATEMENT

All activities and courses, including technology education, vocational-technical education, and physical education courses at Smethport Area School District are available to all students as required by Title VI, Title IX and Section 504. If there are prerequisites, they are based on your ability and aptitude, not on your race, color, national origin, sex or any disability. Students with disabilities may qualify for special services and instruction, and equipment modifications so you can successfully complete the course or participate in any activity.

If you have questions about equal educational opportunities, contact Title IX Coordinator, Mr. Brice Benson, at the Administrative Offices, 414 S. Mechanic Street, Smethport, PA 16749 (814-887-5543)

GRADUATION REQUIREMENTS

To graduate from Smethport Area High School, a student must successfully complete the requirements of their individualized educational program and/or the following requirements.

Department	Credit Requirements		
English	4 Courses		4.0 Credits
Mathematics	4 Courses		4.0 Credits
Science	4 Courses		4.0 Credits
Social Studies	4 Courses		4.0 Credits
Health	1 Course	Grade 9	1.0 Credit
Physical Education	4 Courses	Grades 9,10,11,12	2.0 Credits
Electives		Grades 9,10,11,12	

Promotion Requirements

Grade levels for students will be determined each year based on the total number of earned credits. Students are not allowed to change grade level at the end of the first semester, even if the number of earned credits meets the requirements for the next grade level.

To be eligible for grade placement a student must have earned the following minimum credits:

- To be classified as a freshman (9th grade), a student must successfully complete eighth grade.
- To be classified as a sophomore (10th Grade), a student must have accumulated a minimum of six (6) credits prior to the start of the school year.
- To be classified as a junior (11th Grade), a student must have accumulated a minimum of thirteen (13) credits prior to the start of the school year.
- No student shall be considered a member of the senior class (Grade 12) unless the student has, prior to the start of the academic senior year, a sufficient number of credits which added together with number of credits being taken during the student's senior year would make the student eligible to graduate at the next commencement ceremony.

Career Education-Community Service-Job Shadowing

Students must complete a "Career Portfolio". Development of the portfolio is embedded in courses provided in the curriculum including the Grade 9 Careers/Computer course. As a student progresses towards graduation, portfolio items will be added from other courses as well. An individual career plan is developed in the Grade 7 careers course. Other pieces of evidence include participation in job fairs, work experiences, job shadows, college fairs, etc.

1)Community Service Hours- Students in the **Class of 2023** must complete **15 hours** of community service. Students in the **Class of 2024** and beyond must complete a total of **20 hours** of community service. Students must complete **5 hours each year**. Students not meeting the annual community service hour requirements are assigned an **additional 5 hours** for each year in which the requirement has not been met. Penalties are assessed on the last day of school.

2)Job Shadowing- Students must complete two job shadow experiences. Students who have not met the deadline for job shadow experiences by the end of the first semester of their senior year will receive an additional 5 hours of community service assigned to be completed. Job shadows must be completed to meet graduation requirements.

GRADE	REQUIRED	REQUIRED
9TH GRADE	5 HOURS	
10TH GRADE	5 HOURS	
11TH GRADE	5 HOURS	
END OF SEMESTER 1-12TH GRADE	5 HOURS	
	20 TOTAL HOURS	2 JOB SHADOWING

Keystone Exams/CTC Pathway/Individualized Education Plans

Students must meet the state and local graduation requirements. Five options, or pathways, are provided as means to meet the new Pennsylvania Department of Education and locally-adopted requirement. Please see page 33.

Course Grading

Marking Period and Final grades for courses will be given using numerical percentages based on a 100% scale. The highest numerical percentage grade possible for a course is 100%. AP courses will be weighted at the conclusion of the course by adding 10 points to the final percentage if the AP Exam is taken. For AP courses only, the final grade could be greater than 100%.

GPA Calculations

All GPA calculations are based on numerical percentages based on a 100% scale. Smethport Area High School can provide students and parents with three GPA Calculations.

Marking Period GPA- The marking period calculation is the GPA for all grades given in a particular marking period.

By Year GPA- The current year GPA calculation is the GPA for all grades given in a particular academic year. Reported for grades 9, 10, 11 and 12.

Cumulative GPA- A student's overall cumulative grade percentage is officially calculated using end of course percentages and credit earned. Cumulative grade percentage is calculated using all subjects for which credit is attempted. Generally, the calculation is run at the close of the academic year. The overall final percentage is calculated by adding all final percentages earned for each class taken and that total divided by the number of credits attempted. The cumulative GPA calculation includes only completed courses that are reported for grades 9, 10, 11, and 12.

Transfer/Home School Student GPA Calculation

Smethport Area High School includes all previous academic records for grades 9 –12 for transfer students on the student transcript.

- The school the student attended is listed with the grades for each year.

- A Cumulative GPA will be calculated, using numerical percentages, for all completed courses to date.
- If a student's academic record does not include numerical percentages, numerical percentages will be recorded as follows:
 - The school counseling department will attempt to obtain percentages from the students' previous school.
 - If percentages are not available the school counselors will record a numerical percentage using the previous schools grading scale if available. If a scale is not available, the Smethport Area High School Scale will be used. The numerical percentage given will be:
 - A letter grade without a "+" or "-" will be given the numerical percentage in the middle of the range for that grade on the scale being used.
 - A letter grade with a "+" will be given the highest numerical percentage for that grade on the scale.
 - A letter grade with a "-" will be given the lowest numerical percentage for that grade on the scale.

Class Rank

Class rank shall be computed by the final grade in all Smethport Area High School courses for which credit is awarded in grades 9-12. Class rank is tallied at the conclusion of each academic year. Any two (2) or more students whose computed grade point averages (GPA's) are identical shall be given the same rank. The rank of the student who immediately follows a tied position will be determined by the number of students preceding and not by the rank of the proceeding person. A student's grade point average and rank in class shall be entered on the student's record and shall be subject to Board policy on release of student records. Cumulative grade point average is derived from adding all final percentages earned for each class taken and that total divided by the number of credits attempted. Advanced Placement (AP) courses are weighted by adding 10 percentage points to the final grade if a student participates in the AP Exam at the conclusion of the course. College level courses, nor any other courses other than AP courses, are not weighted. Students taking approved courses through a Smethport Area School District-approved 3rd party (correspondence course, summer school course, online provider) will have final grades calculated for the purpose of GPA. Any remedial course, credit-recovery course, through a District-approved 3rd party provider will not be calculated towards GPA.

Class Honors

Smethport Area High School awards a Valedictorian and a Salutatorian each year at the conclusion of the academic term for the senior class. The Valedictorian will be the student with the highest grade point average and the Salutatorian will be the student with the second highest grade point average. Students earning class honors must be a member of the grade 9 cohort. Senior class membership is determined by the year in which the graduating class entered their 9th grade. Students earning class honors must have been a registered Smethport Area High School student for the complete junior and senior year of the grade 9 cohort membership.

Curricular Programs of Study

The Smethport Area High School has three major curricular programs. These programs are designed to prepare students for further education and/or the proficient skills needed to enter the job market.

Accelerated College Prep and Academic College Prep

These programs are designed for the student who plans to continue his/her education at a four-year college or university upon graduation.

Tech Prep/Career Prep

Designed for students who plan on pursuing an associate degree or certification in a technical program, entering

the military or directly entering the workforce upon graduation.

Seneca Highlands Career & Technical Center

The Seneca Highlands Career & Technical Center located in Port Allegany, PA. Students attend the CTC on a half-day basis where they receive vocational-technical training in one of ten distinct skill areas. These areas include: Automotive Mechanics, Building Construction Occupations, Culinary Arts, Early Childhood Education, Engineering Technology, Health Assistant/Allied Health Careers, Heavy Equipment/Maintenance, Homeland Security, Welding Technology, Networking Systems Technology.

Course Availability Statement/Course Drop Procedure

This booklet describes all courses offered at Smethport Area High School. The school reserves the right to remove, postpone, or alter course offerings because of insufficient interest, enrollment or other unforeseen factors.

The number of students signing up for a course during the registration process determines how many sections of the course are scheduled into the master schedule. The assignment of teaching staff is also made in accordance with these course registration numbers. Therefore, it is imperative that students thoughtfully consider their course selections at the time of course registration. If circumstances change after the time of course registration, the student is asked to contact the school counseling office. Students who register for courses during the initial registration process are expected to participate in these courses unless scheduling conflicts require a change in their schedule. Placement into the appropriate level of a course is very important. Our faculty has found that students who meet the published prerequisites are most likely to be successful in the course. Students are expected to be challenged, not frustrated. Students will be provided with a copy of their schedule for the year on the first day of school in the fall. Students should review all scheduled courses for the year carefully. If the student finds they have a concern with their schedule, they should complete a Schedule Change Request. The student's counselor will review the request. Add/Drop Window is posted in the student handbook. Necessary changes fall into the following categories:

- The student had no schedule or an incomplete schedule due to a master schedule conflict.
- A course is needed for promotion or graduation purposes.
- The student lacks a necessary prerequisite for a course.
- The student has passed and received credit for the course previously.
- A course must be changed to accommodate an administrative need.
- Other extenuating circumstances will be considered by the principal and counselor.

Career Cruising

CareerCruising.com is a web-based career exploration program available to all students at Smethport Area Jr/Sr High. To get into the site our username is Smethport and the password is hubbers. Each student has their own username and password to gain access to their portfolio, which is established in grade 7. Students can take a career and learning styles assessment on Career Cruising. As they research careers, students can learn about training programs and colleges. They can watch interviews with persons in their field of interest. They can save their searches to their portfolio. Students receive an initial introduction to Career Cruising in grade 7 via the Career Exploration course and again in grade 9 in the Career and Computer Concepts course. This is one way the student will satisfy the requirement that students develop a career portfolio as specified in the PDE Career Education and Work Standards.

College Courses

Smethport Area High School encourages students to participate in courses in which they can earn college credit. Smethport Area High School offers several courses in conjunction with the University of Pittsburgh at Bradford that can be taken for college credit. Dual Enrollment courses are noted as such in the Program of Studies Guide each year. Students and parents are responsible for all college course fees. Students can elect to participate in

college classes on college campuses. These can be taken to complete high school graduation requirements. Students considering this option must discuss their intentions with the school counselor and principal. Students and parents are responsible for all fees and transportation. Students can receive high school credit for college courses taken. Courses are given the same credit value as similar Smethport High School courses. College level courses are not weighted. If a college class that is taken on a college campus is not being taken to meet a Smethport High School graduation requirement, the student may choose to not have the college course grade included in their Smethport High School GPA/class rank.

Advanced Placement Courses (AP)– Courses are intended for academically talented students whose abilities, interests, and demonstrated levels of performance illustrate that they can do difficult, college-level work in high school. Students may earn advanced standing at many colleges by earning high scores on the Advanced Placement Test taken at the end of each AP course. Students taking this class may elect the course to be weighted by adding 10 percentage points to their final grade if they take the AP® test at the end of the course. There is a fee for the test. The student is responsible for the exam fee. The tests are prepared by Educational Testing Services (ETS) and are administered at Smethport High School in May.

Post-Secondary Education/Admissions Requirements

Any student who plans to continue his/her education beyond high school in a technical school, community college, or four-year college or university should select courses that will meet the admission requirements of that institution. The admission requirements of colleges and universities differ widely, so it is important that the student research admission requirements for the school(s) in which he/she is interested. Information for this purpose is available in the school counseling office, on Career Cruising (www.careercruising.com) and through the PHEAA/AES online college planning site: www.educationplanner.com

Glossary

Some of the words and terms used in this booklet may not be familiar. The following brief explanations may be helpful.

Class Rank– A procedure by which each student is ranked according to his/her overall final percentage grade average.

Credits– Credit is earned upon successful completion (passing grade) of a course. Smethport Area School District awards credit as follows:

- **1 Credit** -A course that meets every other day all year
- **.5 Credit** -A course that meets every other day for one semester
- **.25 Credit** - A course that meets every other day for one marking period

Dual-Enrollment Courses– In agreement with the University of Pittsburgh at Bradford, qualified students may apply for dual-enrollment in specific courses offered at Smethport High School. After successful completion of the course, students will receive one high school credit. Students will also receive college credit from the University of Pittsburgh at Bradford. Fees may be assessed by the college for these courses. Information is provided by the classroom teachers regarding college requirements and fees.

Elective Course– Electives are courses that students choose to study. Elective courses cannot be taken in place of required courses. They are selected to satisfy total course requirements for graduation in addition to the required courses. Any elective must meet enrollment requirements in order to be scheduled.

Keystone Exams- The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Literature, and Biology. The Keystone Exams are one component of Pennsylvania's high school graduation requirements.

Prerequisite– A prerequisite is a course or requirement that a student must complete in order to qualify for entry into another course. If a prerequisite is required before taking a course, the prerequisite is listed in the course description. Prerequisites can also come in the form of teacher recommendations.

Required Course– A required course must be passed by all students in order to qualify for a diploma.

Semester– A semester is one-half of a school year.

Transcript– Official and complete copy of a student’s academic work at Smethport Area High School, which include credit attempted, credits earned, courses completed, final grades, and yearly/cumulative grade point average. A Smethport Area High School transcript is generated after a student has completed one full semester at Smethport Area High School. Courses taken outside of Smethport Area High School will not be calculated into a student’s Grade Point Average (GPA) for the purpose of class rank.

NCAA Requirements- Students interested in participating in athletics at the college level should visit the NCAA Clearinghouse website, print out the College-Bound Student-Athlete Guide and become very familiar with the “Core Course” and SAT/ACT requirements. They can be very different from the college admissions requirements and in most cases are more stringent. The NCAA Initial-Eligibility Clearinghouse has very specific course requirements for students wishing to participate at the Division I or Division II level. Smethport Area School District courses accepted as “Core Courses” by the NCAA Clearinghouse are designated in the course descriptions. The NCAA Clearinghouse must declare student athletes wishing to participate and be eligible for athletic scholarship/participation at the Division I and II levels during their Senior year. Any student considering participation in Division I or II athletics must register with the NCAA Clearinghouse after their Junior year. It is imperative that the student and/or parent notify the school counselor that he/she is applying to the Initial-Eligibility Clearinghouse so that the appropriate scheduling can be maintained. It is highly recommended that all student athletes become familiar with the NCAA requirements by visiting the NCAA Clearinghouse website at www.ncaaclearinghouse.net.

PROGRAMS OF STUDY – FOUR YEAR PLANS

Accelerated Academic Track

(recommended for students considering a four-year college)

Accelerated College Prep				
Core Course Selections – Minimum 7 credits must be scheduled each year				
Subject	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9	English 10	English 11	English 12
Mathematics	Algebra II	Geometry	Trigonometry & Pre-Calculus	AP Calculus or Calculus
Science (Must take Biology, Chemistry, Physics, and 1 additional course)	Biology 9	Chemistry	Physics and/or Chemistry II	AP Physics and/or Anatomy and Physiology
Social Studies	Early American History	Modern American History	Current American History & Economics	American Civics or American Political Process
Technology/Careers	Careers and Computer Concepts			
Foreign Language	1 st year of an offered language	2 nd year of an offered language	(3 rd year or 2 nd language recommended)	(4 th year or 2 nd language recommended)
Physical Education and Health	Phys. Ed 9 and Health 9	PE HS	PE HS	PE HS Personalized Fitness
Electives	1 credit	2 credits	3 credits	3 credits

Academic Track- College Prep

(recommended for students considering a four-year college)

Academic College Prep				
Core Course Selections – Minimum 7 credits must be scheduled each year				
Subject	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9	English 10	English 11	English 12
Mathematics	Algebra I	Algebra II	Geometry	Trig. & Adv. Math or Trig. & Pre-Calculus
Science (Must take Biology, Chemistry, Physics, and 1 additional course)	Biology	Chemistry and/or Applied Physics I	Chemistry II and/or Applied Physics I/II	Applied Physics II and/or Chemistry II and/or Environmental Science
Social Studies	Early American History	Modern American History	Current American History & Economics	American Civics
Technology/Careers	Careers and Computer Concepts			
Foreign Language	1 st year of an offered language	2 nd year of an offered language	(3 rd year or 2 nd language recommended)	(4 th year or 2 nd language recommended)
Physical Education and Health	Phys. Ed 9 and Health 9	PE HS	PE HS	PE HS Personalized Fitness
Electives	1 credit	2 credits	3 credits	3 credits

Academic Tech Prep Track
*for students planning to attend
a 2-year college or technical program or enter the job market.*

Tech Prep/Career Prep				
Core Course Selections – Minimum 7 credits must be scheduled each year				
Subject	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9	English 10	English 11	English 12
Mathematics	Algebra I or Algebra IA	Algebra II or Algebra IB	Geometry	Trig. & Adv. Math or Trig. & Applied Mathematics
Science (Must take Biology, Chemistry, Physics, and 1 additional course)	Pre-Biology Biology	Biology Applied Physics I	Applied Physics I Applied Physics II	Applied Physics II and/or Environmental Science
Social Studies	Early American History	Modern American History	Current American History & Economics	American Civics
Technology/Careers	Careers and Computer Concepts			
Foreign Language	1 st year of an offered language	2 nd year of an offered language	(3 rd year or 2 nd language recommended)	(4 th year or 2 nd language recommended)
Physical Education and Health	Phys. Ed 9 and Health 9	PE HS	PE HS	PE HS CTC PE Personalized Fitness
Electives	2 credit	3 credits	3 credits	3 credits

COURSE DESCRIPTIONS

ART

Art I – Grades 9-12

.5 credit

This introductory studio course is a one semester elective that will introduce the students to skills and media that are utilized in the other art electives including: drawing, painting, and design.

Art II – Grades 9-12

.5 credit

Prerequisites: Art I

This studio course is a one semester elective offered to students who have passed Art I. This course will prepare the students for Drawing 1 and Painting 1. Students will have a chance to experience a variety of mediums.

Drawing I – Grades 10-12

.5 credit

Prerequisites: Art II

This studio course is a one semester elective offered to students in grades 10-12 who have successfully completed Art II and have a desire to learn the fundamental skills of drawing. The course is recommended for any student who plans to pursue any visual art pathway. Weekly sketchbook assignments are an important part of the course.

Drawing II – Grades 10-12

.5 credit

Prerequisites: Drawing I

This studio course is a one semester elective offered to students in grades 10-12 who have successfully completed Drawing I. The course builds upon the basic skills acquired in Drawing I. The Elements and Principles of Design are studied and applied to the creative process of planning and executing various drawing challenges.

Painting I – Grades 10-12

.5 credit

Prerequisites: Art II

This course is a one semester elective offered to students in grades 10-12 who have successfully completed Art II. The course provides the foundations of painting, its application and materials. It focuses on color theory, watercolor and acrylic painting. Students develop an understanding of composition and paint manipulation. Solid drawing skills are recommended for success in the course.

Painting II – Grades 10-12

.5 credit

Prerequisites: Painting I

This course is a one semester course offered to students in grades 10-12 who have successfully completed Painting I. This course is a continuation of Painting I. It provides a deeper exploration into two dimensional techniques with emphasis on the development of a student's individual point of view.

3-D Design I – Grades 11-12

.5 credit

Prerequisites: Drawing II or Painting II

This on semester course is offered to students in grades 11-12 who have successfully completed Drawing II or Painting II. In this studio course, the Elements and Principles of Design are studied and utilized to create art that exists in three dimensions. Various artists, art styles and genres will be explored.

3-D Design II – Grades 11-12

.5 credit

Prerequisites: 3-D Design I

This course is offered to students in grades 11-12 who have successfully completed 3-D Design I. This course is a continuation of 3D-Design I. It provides a deeper exploration into the world of three-dimensional designs. Emphasis is on the development of a student's individual point of view. Students will build mastery in technique, composition/design, and creative problem solving.

AP Studio Art – Grade 12

1 credit

Prerequisite: Students must be recommended by an art teacher and/or have completed at least two of the following courses:

Art I/II, Drawing I/II, Painting I/II, and 3D Design I/II

This class is an Advanced Placement course which enables highly motivated students to do college-level work in studio art while still in high school. Based on the goals delineated at the College Board website at www.collegeboard.org, AP Studio Art students are asked to improve their skills as researchers, experimenters, and college-level artists. This course has been developed to accommodate students who have expressed an interest in completing the A. P. Drawing Portfolio Exam, the A. P. 2D Design Portfolio Exam, or the AP 3D Design Portfolio Design Exam. Through direct teacher instruction, emphasis will be placed on the production of a volume of quality pieces of artwork. The submitted portfolio, if qualified, can earn the student college credit and/or advanced placement in college. Each portfolio has three sections: Selected Works (which show quality), Sustained Investigation (Concentration), and a Range of Approaches (or Breadth). The AP Studio Art exam is strongly recommended.

BUSINESS

Career and Computer Concepts – Grade 9

1 credit

This course is a full-year, required course for all ninth graders. The course will focus on the following topics: The World of Banking, Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and explore being an Entrepreneur. Each student will also get to experience a mock job interview led by Career Link and/or local business owners. How does that apply to Computer Applications? The student can apply banking theory using Microsoft Excel/Google Sheets, research a career of choice and prepare a Microsoft PowerPoint/Google Slide presentation, and use Microsoft Word/Google Docs to complete a letter of interest, resume, and thank you letter. We will also be exploring many online career resources.

Principles of Marketing – Grades 9–12

.5 credit

This project-based business course will help develop the students' understanding and skills in the functional areas of marketing, and will be designed around the four P's – product, price, place, and promotion. It will also expand on interpersonal, management, entrepreneurship, and career building skills.

Accounting I – Grades 10-12

1 credit

Applies fundamental understanding to the theory required in any system of Accounting so the student will understand what an employer expects. This is accomplished through a variety of accounting procedures including work projects and work sets.

Accounting II – Grades 11-12

1 credit

Prerequisite: Accounting I

A course designed to take those students that show an aptitude for this kind of work and teach them more advanced procedures so they will have a better background and, as a result, become better employees. Students who have successfully passed Accounting I with a C or better are encouraged to continue in the program. Students enrolling in Accounting II must have completed prerequisite Accounting I.

Advanced Computer Applications and Basic Web Page Design – Grades 10-12**1 credit**

This full year course is designed around advanced word processing skills, which will enable students to learn how to merge documents, create newsletters, menus, business cards, brochures and other business-related documents using Microsoft Word and Publisher. The web page design portion of the course is to teach students how to effectively design a website that is current, relevant, consistent, accurate, and has purposeful information using different web development platforms.

Introduction to Database – Grades 10-12**.5 credit**

This one semester course is designed to provide an opportunity for students to receive training using a computerized database management system, known as Microsoft Access. Students will master introductory concepts and techniques of database design and usage as they relate what is learned in the classroom to the real world. Students will design, create, access, and manage a set of files using tables, forms, queries, and reports similar to those used in business today. College or career bound, this course may be considered a valuable asset to the student. This is a project-based course.

Introduction to Spreadsheets – Grades 10-12**.5 credit**

This one semester course will focus on the computer program, Microsoft Excel. The students will learn how to create, generate and manipulate a computer spreadsheet in the context of common business situations and for maintaining personal finances. This will include budgeting, credit cards, loans, and savings. College or career bound, this course is a valuable asset to the student. This is a project-based course.

DRIVER EDUCATION

Driver Education – Grade 10**.25 credit**

Driver Education can help develop the knowledge and skills essential to safe driving. Equally important is the development of attitudes to share the road and cooperate with other users in the highway transportation system. The student is exposed to material pertaining to the use of the automobile in the highway environment. The material includes safety procedures, laws, ownership and the adverse elements of the environment, alcohol and the road system.

ENGLISH

English Language Arts will give students the necessary tools, skills and procedures for effective communication. Language use and literature will be two major focal points. Students will be engaged in the classroom activities of reading, writing, speaking, listening and researching. English is required for all students, grades nine through twelve, at each grade level. In addition, students may opt to take an elective offered by the English department.

English 9**1 credit**

In English 9, students will gain an understanding of the processes for composing texts, where relative content, basic grammar, vocabulary choice, and mechanics will be reinforced. Students will participate in the processes necessary for conducting and presenting research. Literature will be read with emphasis on comprehension and understanding literary terms. NCAA Core Course

English 10**1 credit**

In English 10, the students will be exposed to and learn all of the same skills that are taught in Advanced English 10. The students in English 10 will do more of the work and reading during class, and the pace will not be as fast as Advanced English 10. Students will take the Keystone Literature Exam at the conclusion of this course. NCAA Core Course

English 11**1 credit**

Using a variety of texts and genres, many from the American literary tradition, students in English 11 will read critically, write in a variety of modes and present to both small and large groups. Students will explore language usage and style in the context of use, in both published texts and in texts of their own. A strong focus will be on expository writing and research skills. In addition to several smaller papers, a major research paper is a requirement for the successful completion of this course. NCAA Core Course

English Composition 1 (ENG 0101)**1 credit**

The first of two required competency courses in English composition, this course focuses on the writing process and on the kinds of writing common in the academic disciplines. The Composition Course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

English 12**1 credit**

Using English literature as a basis, this course will focus on the reading, writing, and speaking skills which will allow students to be successful communicators as they prepare for life and work. NCAA Core Course.

Literature and Interpretation (ENG 0110)**1 credit**

This course is an examination of the ways in which both literary and non-literary texts create meaning and an introduction to some of the methods of literary interpretation. Beginning with literary concepts like genre, narrative, character, and figurative language, this course considers the interaction among the reader, the writer, and the text itself, and between different texts. The Literature Course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

AP English Literature and Composition – Grade 12**1 credit**

This course is aligned with The College Board's definition of AP English and Composition. It is a strenuous course meant to enable students to not only analytically read, but also to write appropriately at the college level. Students will complete weekly reading assignments to develop thought provoking writings. These writing assignments will be cyclical: that is, students will continually revise drafts to develop their rhetorical skills. The course will consist of several units focusing on genre and contextual study. Students will read a variety of works representing British and American writers from the 17th Century to modern literature. Because the course is dense, there will be a summer reading list and journal assignment. This course will culminate with the AP English Literature and Composition Exam in the spring. The exam is based on a five-point scale; a three will earn students credit at universities accepting AP credits. Students taking this class may elect the course to be weighted by adding 10 percentage points to their final grade if they take the AP® test at the end of the course. There is a fee for the test. The student is responsible for the exam fee. NCAA Core Course

Health Education – Grade 9**1 credit**

Ninth grade students are required to take Health. The goal of the Health course is to motivate students to build healthy lifestyles through the development of life skills based on age-appropriate content information. Students will be encouraged to think for themselves and develop responsibility for their own health.

In order to obtain this goal, the following areas will be studied:

- | | |
|---------------------------------------|-----------------------------------|
| 1) Personal Health | 5) Consumer Health |
| 2) Nutrition | 6) Family Life and Sex Education |
| 3) Community and Environmental Health | 7) Drugs and Narcotics |
| 4) Mental Health | 8) First Aid and Safety Education |

Physical Education**.5 credit**

Physical Education is required of all students in Grades 9 through 12. A well-founded program of physical education with a wide variety of activities is available to all students each year. The program provides an opportunity for students to try a variety of activities and enable them to acquire knowledge and some skills in a number of individual and team activities. A continuity of progression is encouraged when the schedule permits. Each student is required to sign up for a course in physical education every year.

Personalized Fitness – Grades 11-12**.5 credit**

Personalized Fitness is designed for the student who is an athlete and is a member of a competitive sport or for the student who is taking extra credits and cannot fit physical education into their school schedule. Students will meet with the instructor the first week of the semester and will be given a pre-test in a variety of fitness areas. These tests can be but are not limited to: timed mile, 10 minutes on the treadmill, timed sit ups, timed pushups, sit and reach, flexed arm hang and pull ups, etc. a post test will be given at the end of the semester. Students must show an improvement at the end of the semester or if they are in a healthy zone, must remain the same. Students must communicate with the instructor through email or google classroom and let the instructor know their fitness program or fitness log. The activity log must be filled in every week and have at least four hours of physical activity. The students should have a better understanding of how to be physically active throughout their lifetime and maintain a healthy level of fitness, they should be able to plan an individual exercise program and find resources in which to improve upon and/ or discover new exercises to perform. Students will also need to determine when and where they will be able to exercise each day if they are not on a sports team.

LANGUAGES

Spanish I – Grades 8-12 (HS Credit for 8th Graders)**1 credit**

In this introductory course, students will learn strategies for communicating competently and effectively in Spanish with acceptable standards of pronunciation and grammatical correctness. Emphasis is placed on communication in the present tense as well as on the acquisition of vocabulary. Cultural aspects of the Spanish-speaking world are also emphasized. NCAA Core Course

Spanish II – Grades 9-12**1 credit**

This course will begin by reviewing the content of Spanish I. Students will then move on to more advanced grammatical forms while continuing to enlarge their vocabulary. As with first year Spanish, this course emphasizes cultural aspects of the Spanish-speaking world. Spanish I and II together provide a strong foundation for students needing to continue Spanish at the intermediate level in college. NCAA Core Course

Spanish III & IV – Grades 10 – 12**1 credit**

In Spanish III and IV, students further develop their grammatical knowledge and vocabulary skills through the reading of novels, short stories, poems, and cultural excerpts as well as through the viewing of movies in Spanish. In addition, aspects of the course are tailored to meet the Spanish-speaking needs of students going into specific professions such as health care and law enforcement. Spanish III and IV together provide adequate preparation for the SAT subject test in Spanish. NCAA Core Courses

German I – Grades 8- 12 (HS Credit for 8th Graders)**1 credit**

In this introductory course, students will learn strategies for communicating competently and effectively in German with acceptable standards of pronunciation and grammatical correctness. The four skills – listening, speaking, reading and writing – will be covered and a particular emphasis will be placed on vocabulary acquisition. NCAA Core Course

German II – Grades 9 – 12**1 credit**

This course is a continuation of the first year course and will begin by reviewing the content of German I. Students will then move on to more advanced grammatical forms while continuing to enlarge their vocabulary. Students will also apply their knowledge of German to selected readings. This course provides strong preparation for students planning on continuing their German studies at the intermediate level in college. NCAA Core Course

German III – Grade 10-12**1 credit**

In German III students will review and expand the skills they acquired in German I and II to work with a variety of authentic German texts: short stories, poems, contemporary articles, and songs. They will broaden their knowledge in the areas of communication and culture while increasing their writing and reading practice in German.

MATHEMATICS

Pre-Algebra – Grade 9 and 10 (by recommendation)**1 credit**

Algebra 1A/1B is a two-year course which will cover all topics in a traditional one year Algebra 1 course. The slower pace will allow time for intervention as needed. Algebra 1A covers solving and graphing linear equations and inequalities, reading and interpreting word problems, and understanding functional relationships using graphs, charts, and tables. Algebra 1B covers solving and graphing linear equations and inequalities, reading and interpreting word problems, solving quadratic equations by graphing, by factoring, by completing the square, and by the quadratic equation, understanding functional relationships using graphs and charts, and working with rational and irrational expressions to solve simple rational and radical equations. Students will take the Keystone Algebra I exam at the conclusion of Algebra IB in grade 10.

Algebra 1**1 credit**

Students entering into 8th grade Algebra 1 must meet three of the following criteria:

- Proficient or advanced 7th grade PSSA Reading
- Proficient or advanced 7th grade PSSA Math
- 85% or better in 7th grade math
- Teacher recommendation

Students entering into 9th grade Algebra 1 must meet three of the following criteria:

- Proficient or advanced 8th grade PSSA Reading
- Proficient or advanced 8th grade PSSA Math
- 85% or better in 8th grade math
- Teacher recommendation

This course is a continuation of Math 8, which means the student must have developed a strong foundation in the previous course. The student will continue working in the same textbook, as the material will build in both intensity and difficulty. After a short review, the student will be exposed to new concepts dealing with adding, subtracting, multiplying, and dividing polynomials and rational expressions, simplifying radical expressions, solving percent problems, solving systems of equations, finding probabilities, writing numbers in scientific notation, and solving word problems dealing with fractions, decimals, percents and consecutive integers. Students will take the Keystone Algebra I exam at the conclusion of this course. NCAA Core Course

Algebra II – Grade 9-12**1 credit****Prerequisite: Algebra I**

The purpose of this course is to strengthen and expand Algebra I skills, as well as to lead the students into developing the skills related to basic geometry. Concepts of algebraic proofs, relationships, graphs, operations, geometry skills, etc. are implemented in this course. Throughout the entire course, the student will deal with application problems associated with each concept of the course. NCAA Core Course

Geometry – Grade 10-12**1 credit****Prerequisite-Algebra II**

The purpose of this course is to allow students to develop a deep understanding of mathematics through thinking, reasoning, and problem solving. Students will be engaged in mathematical discovery through the use of differentiated approaches and visual instruction. The course will begin by introducing the basic tools of Geometry and continue into reasoning and proofs. The students will then study parallel and perpendicular lines, congruent triangles and triangle relationships, polygons, quadrilaterals, similarity, area, surface area, and volume. The course will conclude with the study of right triangles and the trigonometric relationships. This course will cover many of the concepts needed to excel on both the SAT and ACT college entrance exams. NCAA Core Course

Applied Mathematics – Grade 12**1 credit****Prerequisite –Algebra I, Algebra II**

This course will focus on fundamental concepts of arithmetic, algebra, geometry, and trigonometry. It will support these concepts with practical applications in a variety of technical and career vocations. The focus is on learning the computational procedures and then applying the skills to problem solving in applications.

Trigonometry and Advanced Algebra – Grades 11-12**1 credit****Prerequisite –Algebra II and Geometry**

The purpose of this course is to strengthen and expand algebra skills, as well as to lead the students into developing the skills related to trigonometry. The course will begin with a review of advanced algebra skills and advance into more complex concepts dealing with trigonometric functions, their graphs, and trigonometric identities. Throughout the entire course, the student will deal with application problems associated with each concept of the course. NCAA Core Course

Pre-Calculus (MATH 0132) – Grades 11-12**1 credit****Prerequisite – Successful completion of Advanced Algebra II and Geometry**

The topics include intermediate algebra, functions and graphs, polynomial functions, rational functions, inverse functions, logarithmic and exponential functions, and trigonometry. Once the student has successfully completed this course, he or she may advance into Calculus or AP Calculus AB. The Trigonometry and Pre-Calculus course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

Calculus (MATH 0140) – Grade 12**1 credit****Prerequisite – Successful completion of Pre-Calculus**

The first term of a three-term sequence required of all engineering, mathematics, and chemistry majors, and is the basic course leading to all advanced courses in mathematics and the natural and physical sciences. A study of the derivative, trigonometric functions, the integral, and applications of the derivative and the integral. The Calculus course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

Advanced Placement Calculus AB® – Grade 12

1 credit

Prerequisite – Successful completion of Pre-Calculus

This course is designed with the idea that students learn best when they have an intuitive understanding of the concepts of Calculus. Not only will students learn the mechanics of each of the concepts, but they will also learn the *why* behind each of the major topics. This will help prepare the student for the AP Calculus AB Exam given in May. The course will begin day 1 with an intensive study of limits, derivatives, and integrals. These topics will be studied from four different perspectives—numerical, verbal, analytical and graphical. The TI-84 Calculator will be an integral part of this course, as it is required for the AP Exam. This course will cover all of the concepts presented in a college Calculus I course as well as half of a college Calculus II course. This is a fast moving course that requires a significant amount of work outside the classroom (in order to thoroughly prepare for the AP Exam). The student's grade will be weighted due to the difficulty level of the course. The course will conclude with the AP Exam given in May. Students taking this class may elect the course to be weighted by adding 10 percentage points to their final grade if they take the AP® test at the end of the course. There is a fee for the test. The student is responsible for the test fee. NCAA Core Course

MUSIC

Junior Choir – Grades 7 – 9

1 credit

Junior Choir is an elective course for those who wish to use their voice to continue their music education. Junior Choir provides an introduction to three and four-part choral music. Emphasis is placed on the changing voice as a means of producing music. Choreography is also introduced to the students. The choir participates in several performances for the school and for the public, including Christmas, Pops, and Spring Concerts. Students are required to perform in these performances.

Concert Choir – Grades 10-12

1 credit

Concert Choir is an elective course for students who wish to use their voice to continue their music education. Musical experiences in concert choir focus on studying and performing a wide variety of four-part vocal music ranging from standard choral literature to modern music. Choreography is also an important part of the concert choir experience. Solo and small ensemble singing are an extension of the choir. The choir participates in several performances for the school and for the public, including Christmas, Pops, and Spring Concerts. Students are required to perform in these performances.

Note: Students should be aware that they will be called upon to perform at functions held outside the regular school day (concerts and rehearsals which must be scheduled after school hours to accommodate the public). They are expected to participate unless excused by the director.

Choral Movement I – Grade 12

.5 credit

Choral Movement class is designed for seniors interested in an intense study of musical movement in the choral program. The Class will focus on music theory necessary to design and perform choreography as well as basic terms, staging, dance steps and formations used in choreography. Students must have a desire to create and teach choreography to peers. Students must have completed one year of choir and currently be in the choir program. This class is an elective class.

Choral Movement II – Grade 12

.5 credit

Prerequisite – Choral Movement I

All Choral Movement II students must have taken Choral Movement I in the Fall semester. Choral Movement II course is designed for students interested in an intense study of music and movement in the choral program. The class will focus on music theory necessary to design and perform choreography as well as basic terms, dance steps and formations used in choreography. Students must have completed one year of choir and currently be in the choir program.

Piano – Grades 9-12**.5 credit**

This course is offered to students interested in learning to play the piano. The course will be taught based on individual needs and previous training. Class enrollment is limited due to the number of piano keyboards and space available. Main focus will be performance of scales, chords, and songs. The course will conclude with a required piano recital.

Show Choir – Grades 10 – 12

The Choral Director will audition and interview each student for this select ensemble. A variety of music with choreography will be performed. All students are expected to attend after school rehearsals and performances. Show Choir members are also members of Concert Choir and perform with the Concert Choir. This select ensemble is expected to perform in the Open Mic Night, Christmas, Pops, and Spring Concerts, as well as several community appearances. The group also auditions and performs every three years at Walt Disney World in Florida. This ensemble is not scheduled with guidance.

Junior Band – Grade 7-9**1 credit**

In Junior Band the students will continue to develop their musical abilities on their chosen instrument. Through graded curriculum and performance music, the student will strengthen their musical abilities in melody, rhythm, harmony and form. Membership in the Junior Band is by demonstration of satisfactory performing level on a band instrument. Junior Band includes eighth and ninth grade students.

Senior Band – Grades 10-12**1 credit**

The band at the senior high level may be thought of as a laboratory situation using actual music as its text or reference. It concerns itself with the elements of music (melody, rhythm, harmony and form) and their application to the immediate problems of the music being used. Specifically, the band concerns itself with the student's ability to:

- A. Improve his/her performance skills.
- B. Acquaint himself/herself with a variety of music literature and style.
- C. Develop independent study habits.
- D. Familiarize himself/herself with ensemble and solo performance.

Each student studies music curriculum and progresses at his/her own rate. Membership in the Senior Band is by demonstration of satisfactory performing level on a band instrument.

Note: All members of Junior and Senior High Band are expected to participate in the Marching Band which includes summer practices, parades, after-school practices, football games and competitions. The only exceptions to this would be conflicting activities or special circumstances arranged between the parent and the director.

Music Theory – Grade 10-12**.5 credit**

This course offers students an opportunity to learn and utilize the concepts of basic music theory. Reading and writing musical notations, rhythms, and key signatures combined with using proper musical terminology will allow students to better understand music, as well as give them the tools necessary to write and compose simple songs.

Music Appreciation – Grades 10-12**.5 credit**

A historical survey of the development of music, intended to provide a background for the understanding and application of music. Emphasis is placed upon the basic elements of music and learning to listen to large-scale works, stylistic differences between composers and historical changes through the various genres of music, from the Middle Ages through the Twenty-First Century.

SCIENCE

Pre-Biology – Grade 9

1 credit

This course is an introduction to the Keystone Biology concepts and is designed as the first of two parts, culminating in the second year with Biology. Basic concepts of the scientific method, characteristics & chemical basis of life, introduction to homeostasis, ecology, bioenergetics, and evolution will be covered in the four 9-week periods. Test taking strategies and study skills will also be discussed.

Biology

1 credit

Students entering into 9th grade Biology must meet three of the following criteria:

- Proficient or advanced 8th grade PSSA Reading
- Proficient or advanced 8th grade PSSA Science
- 85% or better in 8th grade science
- Teacher recommendation

Biology is a branch of science that studies the basis of all living organisms and vital processes. It is organized into 8 units derived from the PA Keystone Exam: Part I~ Cells and Cell Processes: basic biological principles, chemical basis for life, bioenergetics, and homeostasis & transport. Part II—Continuity and Unity of Life: cell growth & reproduction, genetics, theory of evolution, and ecology. At the end of this course students will take the PA keystone biology assessment.

Environmental Science – Grade 11-12

1 credit

Environmental Science is a course dedicated to understanding the interactions between earth's natural systems and the demands placed on them by the human population. This course examines the scientific principles behind natural phenomena and resource cycles. It explains how we utilize these systems and our impact, and potential solutions for the resulting consequences of resource mismanagement and exploitation. There are elements of life science, physical science, and social sciences taught throughout this course.

Chemistry – Grades 11 and Accelerated Grade 10

1 credit

Chemistry is the study of how matter and energy interact at the atomic level. Students will learn about chemical reactions, chemical properties, atomic structure, periodicity, bonding, the Mole, stoichiometry, and the kinetic molecular theory. Class discussions, written lab reports, and hands on activities and as integral part of this course.

Concepts of Chemistry (CHEM 0089) – Grades 11-12

1 credit

Prerequisite: Chemistry

The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements. The Concepts of Chemistry Course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

Physics (PHYS 0103) – Grades 11-12

1 credit

A basic examination of essential topics, including mechanics, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics, relativity, and astrophysics. The Physics Course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

Applied Physics I

1 credit

This course is designed to cover the basic concepts of physics and how they apply to life, industry, and the

future. Topics include motion, force, torque, machines, energy, momentum, heat, and electricity. NCAA Core Course

Applied Physics II

1 credit

Prerequisite: Applied Physics I

This course is a continuation of Applied Physics I. Topics include: electricity, magnetism, electrical circuits, waves, sound, and light. NCAA Core Course

Advanced Placement Physics I – Grade 12

1 credit

AP Physics 1 is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. This course includes labs. Students taking this class may elect to receive 10 bonus points added to their final grade if they take the AP® test at the end of the course. There is a fee for the test. The student is responsible for the exam fee. NCAA Core Course

Human Biology (BIOL 0112)

1 credit

General principles of genetics, biochemistry, anatomy, and physiology are illustrated with reference to normal human body functions. Topics are structured to allow the student to better appreciate contemporary issues and controversies. The Human Biology Course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

Wildlife & Fisheries Studies

.5 credit

This course introduces students to Pennsylvania's wild mammals, birds, fish, reptiles, and amphibians including their identification, habitat and ecology. As part of the mammal studies, students will examine various skulls, furs, and scat. The Trout in the Classroom Program provides trout eggs, materials to raise, study, care for and release the trout Fingerlings. In addition, there are walking field trips to analyze the health of local streams, food webs and our watershed in general.

Other topics covered include:

- Principles and history of wildlife management & conservation
- Habitat assessment & habitat management techniques for wildlife
- Population dynamics/ predator-prey relationship
- Wildlife species biology and identification
- Human-wildlife conflict resolution/ the role of hunting in conservation

SOCIAL STUDIES

Early American History [early 1800s – 1917] Grade 9

1 credit

This is a full year course focused on United States history from the pre-Civil War era up to World War One. The course will include the study of the following topics: pre-Civil War, the Civil War, Reconstruction, Western expansion, the Industrial Age, the Progressive Era, and the Spanish American War. Emphasis will also be placed on US political, physical, and cultural geography.

Modern American History [1917 – 1970s] Grade 10

1 credit

This is a full year course focused on United States history from World War One into the 1970s. The course will include the study of the following topics: WWI, the Roaring '20s, the Great Depression, the New Deal, WWII, the start of the Cold War, the Civil Rights Movement of the '50s & '60s, the Kennedy Administration, the Great Society, and the Women's Movement of the 1970s. Emphasis will also be placed on global-political geography.

Current American History & Economics [1970s – present] Grade 11

1 credit

This is a full year course that introduces students to the concepts of basic economics and US history from the 1970s to present. Topics in the history segment will include the following: the Vietnam Conflict, end of the

Cold War, Watergate, the Reagan Era, the Bush years, the New Millennium, world terrorism, and the presidencies of the 2000s. These basics of economics will be covered: Economic Systems, American Free Enterprise, Supply/Demand/Prices, Business & Labor, Money/Banking/Finance, Taxes, and our Fiscal government.

American Civics

1 credit

This is a full year course focused on American Citizenship, including rights and responsibilities; American Democracy, including the Constitution & the three branches of government; and the American legal system, including civil & criminal law, and the justice system. Students will be required to take the official US Citizenship Test.

American Political Process (PS 0102)

1 credit

An introductory course focusing on American politics and government. Emphasis is on political processes and institutions on the national level, including Congress, the presidency, the Supreme Court, political parties, pressure groups and elections. The American Political Process course is offered by the University of Pittsburgh at Bradford for a fee. Three college credits will be earned at the successful completion of the course. NCAA Core Course

TECHNOLOGY EDUCATION

Students are required to pay for materials in the Technology Education courses.

Middle School Course Offerings:

Manufacturing Enterprise – Grade 9-12

1 credit

This is an introductory course into technical drawing/CAD and materials processing. In this course, students will learn how to create detailed plans for the creation of a project using CAD software. Students will also learn to safely use different tools and machinery to manipulate raw materials to solve a problem. Students will be involved in individual and group work. Interested students should have well-developed basic math skills. This course is required for admittance into all advanced Technology Education courses.

Architectural CAD – Grades 10-12

.5 credit

Prerequisite: Manufacturing Enterprise

This semester class is for students interested in technical drawing and/or architecture. Students will study aspects of home design and construction. Students will design structures using AutoDesk Architectural software. All parts of the structure from the foundation to the electrical system will be designed.

Mechanical CAD 1

.5 credit

Prerequisite: Manufacturing Enterprise

This semester course deals specifically with advanced 3D modeling. Students will be working with drawings that are mechanical in nature. Drawings will range from simple technical sketching to advanced 3D part manipulation. Students will be exposed to drafting software and techniques used in most modern-day industrial settings.

Mechanical CAD 2

.5 credit

This semester course deals specifically with advanced 3D modeling and builds on the concepts covered in Mechanical CAD 1. Students will create multi-part projects to be assembled digitally. Students will also create assembly drawings.

Mechanical CAD 3

.5 credit

This semester course deals specifically with advanced 3D modeling and builds on the concepts covered in Mechanical CAD 2. Students will create complex assemblies and assembly presentations. Students will also explore basic 3-D printing concepts and tools.

Mechanical CAD 4**.5 credit**

This semester course deals specifically with advanced 3D modeling and builds on the concepts covered in Mechanical CAD 3. Students will experience real world design challenges and advanced 3D printing concepts and tools.

Introduction to Robotics**.5 credit**

This semester course is designed to expose students to basic programming and coding concepts. Students will work with different robots to achieve a multitude of tasks and challenges of varying complexity. Students will also be exposed to basic circuit building/analysis concepts.

Advanced Robotics**.5 credit**

This semester course is designed to provide students with problem solving scenarios in the realm of robotics. This course will task students with developing a robot that will perform various tasks within a given set of parameters. The challenges will be competitive in nature. Students will have an opportunity to work in teams. Well-developed Math, CAD and 3D printing experience is highly recommended.

Advanced Materials Processing 1**.5 credit**

This semester course is for students who have completed Manufacturing Enterprise and want to deepen their knowledge and skill in the area of materials processing. Students will use CAD and other software to design and plan their projects. Students will develop project plans and process sheets for the production of their projects. Students will use problem solving skills throughout the design and build phases of this course. Students will also learn and practice proper machine safety techniques while building their projects in the materials lab.

Advanced Materials Processing 2**.5 credit**

This semester course builds off of what was learned in Advanced Materials Processing 1. Students will use CAD and other software to design and plan their projects. Students will develop project plans and process sheets for the production of their projects. Students will use problem solving skills throughout the design and build phases of this course. Students will also learn and practice proper machine safety techniques while building their projects in the materials lab. Students will have an opportunity to gain experience on the lathe.

Advanced Materials Processing 3**.5 credit**

This semester course provides students with an opportunity to work independently while building off of what was learned in Advanced Materials Processing 2. Students will use CAD and other software to design and plan their projects. Students will develop project plans and process sheets for the production of their projects. Students will use problem solving skills throughout the design and build phases of this course. Students will also learn and practice proper machine safety techniques while building their projects in the materials lab. Students will have an opportunity to gain experience on the CNC Mill and Laser Engraver.

Advanced Materials Processing 4**.5 credit**

This semester course provides students with an opportunity to work independently while building off of what was learned in Advanced Materials Processing 3. Students will use CAD and other software to design and plan their projects. Students will develop project plans and process sheets for the production of their projects. Students will use problem solving skills throughout the design and build phases of this course. Students will also learn and practice proper machine safety techniques while building their projects in the materials lab. Students will have an opportunity branch out and incorporate a multifaceted approach to solve real world problems.

ELECTIVES

Peer Tutoring – Grade 11-12

.5 credit

This course enables 11th and 12th grade students to assist a teaching professional in the classroom with younger and/or less advanced students than themselves. The course will give those students considering a career in education great insight into that profession while also providing an opportunity for personal enrichment to those with other career aspirations. Students taking this course will work one on one with a teacher of their choice.

School to Work – Credit approval Grade 11 and 12

School-To-Work offers Smethport Area High School students in grade 12 the opportunity to participate in a cooperative educational program that meets both federal and state guidelines. Cooperative education is a combination of occupational instruction coupled with work-based learning. The goal of the School-To-Work program is to increase and augment our students' education and employability skills. Seniors, who are in good standing with their credits and on track to graduate, may have the opportunity to create a schedule that allows them to leave school to go to work. The requirement to be in this program is that you must carry enough credits to graduate on time, have an approved job, and meet academic eligibility.

SENECA HIGHLANDS CAREER and TECHNICAL CENTER

219 Edison Bates Drive, Port Allegany, PA 16743

Phone- 814-642-2573

shctc@iu9ctc.org

Automotive Mechanics

4 credits

Students will perform service, repair, and maintenance procedures on various makes and models. Your training will include power trains, engine, suspension, brakes, exhaust and more. In addition, students will gain hands-on training working with industry current tools and equipment. As an Auto Mechanic, students will be able to work in auto shops, after market manufacturers, and suppliers.

Career Opportunities- General Service Technician, Parts Clerk, Front End Specialist, Auto Body Repair

Industry Recognized Certifications- PSI ~ PA State Inspection Certification, S/P2

Building Construction Occupations

4 credits

Construction is about building a bigger picture: the planning, coordination, and control of a project from inception to delivery. Students will learn to interpret blueprints and specifications, and construct wood products and structures from rough lumber to finish grade. They will learn the safe operation of a wide range of hand, power, and air tools. Students will build a residential house from the ground up.

Career Opportunities- Finish Carpenter, Rough Carpenter, Construction Management, Carpenter Helper, Construction Business Owner

Industry Recognized Certifications- S/P2

Culinary Arts

4 credits

Culinary Arts offers a wide range of career opportunities for those who enjoy preparing exciting cuisines and have an eye toward business ventures. The students' education is enhanced by participating in various catering projects and the operation of a full-service restaurant. Sanitation is one of the most important areas of concern in the restaurant industry today. Students will learn the sanitary aspects of handling food including receiving, storing, preparation, and serving. Career opportunities in restaurants, resorts, country clubs, hotel/motel management; as well as cruise ships and airlines are abundant.

Career Opportunities- Cook, Pastry Cook, Dining Room Host/Hostess, Food and Beverage Directors, Food Sales, Kitchen Helper, Nutrition/Dietary Aide, Waiter/Waitress

Industry Recognized Certifications- ServSafe, S/P2

Early Childhood Education

4 credits

The Early Childhood Education program is designed to teach students the aspects of teaching and working with young children, from birth through elementary age. Students will explore career pathways and develop the characteristics of successful teachers and childcare providers through practicums. Applying theoretical concepts to real-life situations, students are able to take what they have learned in the classroom to their rotation experiences where they learn how to meet the developmental needs and interests of young children.

Career Opportunities- Preschool Aide, Teacher's Aide, Assistant Group Supervisor, Preschool Teacher, Elementary Teacher, Child Care Worker

Industry Recognized Certifications- CDA Certification, First Aid/CPR

Engineering Technology

4 credits

Engineering technicians use the principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, inspection and maintenance. Their work is more narrowly focused and application oriented than that of scientists and engineers. Many engineering technicians assist engineers and scientists, especially in research and development. Others work in quality control, inspecting products and processes, conducting tests, or collecting data. In manufacturing, they may assist in product design, development or production.

Career Opportunities- Machinist or Tool & Die Apprentice, Quality Control Inspector, Draftsman/CAD Operator, Quality Control and Inspection, CNC Operator

Industry Recognized Certifications- National Institute for Metalworking Skills (NIMS, Autodesk, CompTIA, Cisco, Electronics Technicians Association

Health Assistant

4 credits

Students who are caring, compassionate and possess critical thinking skills should check out Health Assistant. Statistics from the Pennsylvania Department of Labor and Industry indicate that occupations in health care will continue to experience the highest growth rate. Students will be introduced to medical terminology and anatomy while learning about common disease conditions. Through scheduled clinical experiences at local long-term care facilities, students apply learned health care theory to actual “hands on” clinical practice.

Career Opportunities- Nurse Assistant, Medical Assistant, Home Health Aide

Industry Recognized Certifications- CNA Certified Nurse Aide

Heavy Equipment Maintenance

4 credits

Students will learn how to service, diagnose, repair, and rebuild gaso-line and diesel powered trucks, tractors, logging and construction equipment. Additionally, students will develop skills in metalworking practice such as arc- welding, oxy/acetylene cutting and fabrication techniques with industry-related projects.

Career Opportunities- Equipment Mechanics, Equipment Manager, Truck Mechanics, Parts Clerks

Industry Recognized Certifications- *PSI ~ PA State Inspection Certification, S/P2*

Homeland Security

4 credits

A student in the Protective Services program will acquire skills from the public safety areas of firefighting, law enforcement, and emergency services. Students can expect to receive instruction; participate in practical applications and situational learning experiences; and prepare to test for national, state, and local certifications in all three areas of public safety. Through exploration and physical practice of skills presented within the curriculum, students will be able to refine personal career opportunities and choose an area of specialization in public safety.

Career Opportunities- Fire Fighting Emergency, Medical Technician, Law Enforcement

Industry Recognized Certifications- Firefighting, EMT, First Aid/CPR

Network Systems Technology

4 credits

Students will learn the basics of networking from the home-user experience to the Internet Service Provider (ISP) level. They will design, build, configure, and troubleshoot networks. They will program routers and switches, explore wireless and security methods. The Cisco Academy curriculum offers an engaging learning experience with many interactive activities embedded in and a large number of labs to encourage hands-on practice.

Career Opportunities- Cable Installers, Computer Support Specialists, Network Administrators, Technology Coordinators, Computer Operators

Welding Technology

4 credits

The Welding field is ever-changing, offers flexibility, and maintains a high demand for future employment and careers. In the Welding program, students will be introduced to the basics of welding in the most common processes: Stick, Tig, Mig, and Oxyfuel welding; and cutting processes: such as oxyfuel, plasma, and air-arc gouging. Students will learn the best methods for preparing and fitting their materials to achieve the best weld possible. Students will also be trained on how to select the best welding process needed to complete a job, while also taking into account cost and time effectiveness. As with any hands on job skill, training in safety will be paramount and best practices will be taught and required.

Career Opportunities- Engineering, Inspection, Military Support, Pipeline Installation, Project Management, Robotics

Industry Recognized Certifications- AWS ~American Welding Society Certification, S/P2

To view current advanced credit opportunities articulated with postsecondary institutions, go to the Equivalency Search results at www.collegetransfer.net Select PA Bureau of Career and Technical Education from the drop down menu. The Capstone Work Experience Program is available for recommended students in all CTC programs of study. Seneca Highlands CTC is an equal rights and opportunities school.

COURSE LISTINGS WITH COURSE NUMBERS

ART (Electives)							
Course #	Course Name	Prerequisite	Grade Levels				Credits
080	Art I		9	10	11	12	.5
081	Art II	Art I	9	10	11	12	.5
086	Drawing I	Art II	9	10	11	12	.5
086A	Drawing II	Drawing I		10	11	12	.5
087	Painting I	Art II		10	11	12	.5
087A	Painting II	Painting I		10	11	12	.5
088	3-D Design I	Painting II or Drawing II			11	12	.5
088A	3-D Design II	3-D Design I			11	12	.5
AP101	AP Art Studio	Approval			11	12	1

BUSINESS (Electives)							
Course #	Course Name	Prerequisite	Grade Levels				Credits
241	Accounting I			10	11	12	1
242	Accounting II	Accounting I			11	12	1
270	Adv. Comp App./ Web Page Design			10	11	12	.5
268	Intro to Spreadsheets			10	11	12	.5
271	Intro to Database			10	11	12	.5
274	Career and Computer Concepts	REQUIRED	9				1
275	Principles of Marketing			10	11	12	.5

DRIVERS EDUCATION							
Course #	Course Name	Prerequisite	Grade Levels				Credits
091	Drivers Education			10	11	12	.5
		(this course scheduled with teacher, non-credit bearing course)					

HEALTH EDUCATION AND PHYSICAL EDUCATION (1 elective)							
Course #	Course Name	Prerequisite	Grade Levels				Credits
354	Health 9	REQUIRED	9				.5
374 A	PE HS		9	10	11	12	.5
246A	Personalized Fitness	Approval	9	10	11	12	.5
346C	CTC PE	CTC Student		10	11	12	.5

ENGLISH							
Course #	Course Name	Prerequisite	Grade Levels				Credits
132	English 9		9				1
142	English 10			10			1
152	English 11				11		1
162	English 12					12	1
160	AP English					12	1

LANGUAGES (Electives)							
Course #	Course Name	Prerequisite	Grade Levels				Credits
191	Spanish I		8/9	10	11	12	1
192	Spanish II	Spanish I		10	11	12	1
193	Spanish III	Spanish II			11	12	1
194	Spanish IV	Spanish III				12	1
107	German I		8/9	10	11	12	1
108	German II	German I		10	11	12	1
109	German III	German II			11	12	1

MATHEMATICS							
Course #	Course Name	Prerequisite	Grade Levels				Credits
731	Algebra I	Math 8	8/9				1
731A	Algebra IA	Recommendation	9				
731B	Algebra IB	Recommendation		10			
733	Algebra II	Algebra I		10			1
737	Geometry				11		1
745	Trig and Adv Algebra				11	12	1
746	Trig and Pre-Calculus				11	12	1
747	Calculus					12	1
775	AP Calculus AB	Trig and Pre-Calculus				12	1
748	Applied Mathematics					12	1

MUSIC							
Course #	Course Name	Prerequisite	Grade Levels				Credits
830	Junior Band		9				1
835	Senior Band			10	11	12	1
841	Junior Choir		9				1
845	Concert Choir			10	11	12	1
850/851	Choral Movement 1 and 2					12	.5

SCIENCE							
Course #	Course Name	Prerequisite	Grade Levels				Credits
941	Biology		9				1
971	Chemistry			10	11	12	1.2
972A	Pre-Biology		9				1
972C	Environmental Science				11	12	1
973	Concepts of Chemistry	Chemistry				12	1
950	Physics			10	11	12	1.2
951	AP Physics 1					12	1
952	Applied Physics I				11	12	1
953	Applied Physics II					12	1
954	Anatomy and Physiology					12	1

SOCIAL STUDIES							
Course #	Course Name	Prerequisite	Grade Levels				Credits
432	Early American History		9				1
442	Modern America History			10			1
452	Current American History & Economics				11		1
462	American Civics					12	1
PS 0102	American Political Process					12	1

TECHNICAL EDUCATION (Electives)							
Course #	Course Name	Prerequisite	Grade Levels				Credits
640	Manufacturing Enterprise		9	10	11	12	1
681	Adv. CAD Systems	Tech Draw with AutoCAD		10	11	12	1
680	Architectural CAD	Tech Draw with AutoCAD		10	11	12	1
670	Applied Technology I		9	10	11	12	1
620 A/B/C	Mechanical CAD 1,2,3, and 4	Sequential	9	10	11	12	.5
621	Intro to Robotics		9	10	11	12	.5
622	Advanced Robotics		9	10	11	12	.5
623 A/B/C	Advanced Material Processing 1,2,3, and 4	Manufacturing Enterprise		10	11	12	.5

SENECA HIGHLANDS CAREER & TECHNICAL CENTER COURSES (ELECTIVES)							
Course #	Course Name	Course Length	Grade Levels				Credits
6	Automotive Mechanics	3 years		10	11	12	4
8	Building Construction	3 years		10	11	12	4
3	Culinary Arts	3 years		10	11	12	4
5	Health Assistant	3 years		10	11	12	4
2	Heavy Equipment Maintenance	3 years		10	11	12	4
15	Welding	3 years		10	11	12	4
011	Network Systems Technology	3 years		10	11	12	4
019	Early Childhood Education	3 years		10	11	12	4

Useful Links:

[PowerSchool](#)

[12th Grade Request Form](#)

[11th Grade Request Form](#)

[10th Grade Request Form](#)

[9th Grade Request Form](#)

[8th Grade Request Form](#)

My Four Year Plan

Course Selections – Schedule 7 credits each year				
Subject	9th Grade	10th Grade	11th Grade	12th Grade
English				
Mathematics				
Science				
Social Studies				
Technology				
Foreign Language				
Physical Education and Health				
Drivers Education				
Electives				
Total Credits:				

Graduation Pathways



SASD PDE GRADUATION PATHWAYS

PATHWAY 1	PATHWAY 2	PATHWAY 3	PATHWAY 4	PATHWAY 5
KEYSTONE PROFICIENCY	KEYSTONE COMPOSITE	ALTERNATIVE ASSESSMENT	EVIDENCE BASED	CAREER & TECHNICAL EDUCATION
Prof/Adv. Keystone Score Alg/Bio/ELA * Completion of PA and SASD requirements in terms of credits and courses	Composite Keystone Score of 4452 * Proficiency on one test No Below Basic Scores * Completion of PA and SASD requirements in terms of credits and courses	Successfully pass Algebra 1B/ Biology/English 10 * (1) of the following ⇒ Minimum score for SAT/PSAT/ ASVAB, ACT* ⇒ Completion of a pre-apprenticeship program ⇒ Accepted at a four year college * Completion of PA and SASD requirements in terms of credits and courses	Successfully pass Algebra 1B/ Biology/English 10 * (1) of the following ⇒ SAT/ACT/AP scores ⇒ Internship/Coop ⇒ Accepted at a four year college ⇒ Industry recognized credential ⇒ Dual Enrollment course * (2) of the following ⇒ Service learning project ⇒ Proficiency on 1 Keystone test ⇒ Full time employment letter ⇒ Internship/Coop program ⇒ NCAA eligibility * Completion of PA and SASD requirements in terms of credits and courses	Successfully pass Algebra 1B/Biology/English 10 * Demonstrate completion or achieve concentrator status of his/her CTC program as outlined by Act 6 of 2017. * Completion of PA and SASD requirements in terms of credits and courses

- *SAT score of 1010
- *PSAT score 970
- *ACT score of 21
- *ASVAB score-minimum score to gain admittance to a branch of the armed services in the year the student graduates
- *SAT subject score of 930
- *Dual enrollment course-UPB CHS

CURRENT ASVAB SCORES	
Service Branch	Required AFQT Score
Army	31
Navy	35
Marines	31
Air Force	36
Coast Guard	45

* These scores are subject to change without notice.

* Board Approved
10/12/2020