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Equal Rights and Opportunities-Nondiscrimination

To comply with Federal laws (including Title IX of Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990), State laws, and state Department of Education regulations concerning equal rights and opportunities and to assure these within our school community, Port Allegany School District declares itself to be an Equal Rights and Opportunities School District; it does not discriminate against individuals or groups because of race, color, national origin, ethnicity, religion, age, sex, marital status, veteran status, or handicap or disability status. The District's commitment to nondiscrimination extends to students, employees, prospective employees, and the community. **Adopted by Board of Education June 16, 1998.**

Create a Solid Academic Portfolio

Your course schedule may seem like a random selection of classes to you, but college admissions officers see it as the blueprint of your high school education. They're looking for a solid foundation of learning that you can build on in college.

Take at least five solid academic classes every semester. The following subjects and classes are standard fare for success in high school and beyond, whether you plan to attend a four-year, two-year, or technical school.

English (Language Arts)

Take English every year. Traditional courses such as American and English literature help you improve your writing skills, reading comprehension, and vocabulary.

- Literature
- Writing/composition and/or speech

Social Studies

Understand local and world events that are happening now by studying the culture and history that has shaped them. Social sciences round out your core curriculum.

- Two semesters of U.S. history
- One semester of Civics and economics
- One semester of world history or geography
- One additional semester of these or other areas

Math

To succeed on college entrance exams, in college math classes, and in most careers, you need algebra and geometry. Take them early on and you'll be able to enroll in advanced science and math in high school – and you'll show colleges you're ready for higher-level work.

- Algebra I
- Geometry
- Algebra II
- Trigonometry and/or Calculus

Science

Science teaches you to think analytically and to apply theories to observations of the natural world. Laboratory classes let you test what you've learned through hands-on-work. Six semesters are recommended.

- Biology
- Chemistry and/or physics
- Earth/space sciences, advanced biology, advanced chemistry, or physics

Foreign Languages

Solid foreign language study shows colleges you're willing to stretch beyond the basics. Many colleges require at least two years of foreign language study and some prefer more.

The Arts

Research indicates that students who participate in the arts often do better in school and on standardized tests. The arts help you recognize patterns, discern differences and similarities, and exercise your mind in unique ways, often outside of a traditional classroom setting.

Computer Courses

More and more college courses and jobs require at least a basic knowledge of computers. Developing computer skills can also bolster your ability to complete college assignments at a faster pace.

Study Halls

No student will be permitted more than two study halls per semester. Many students will have a full schedule based on program and graduation requirements.

Source: ***www.collegeboard.com***

Requirements for students graduating in 2023 and beyond – Act 158 of 2018 (Pennsylvania Law):

• **Keystone Proficiency Pathway**: Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.

• **Keystone Composite Pathway**: Earning a satisfactory 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). Or, for students who were exempted from a Keystone Exam during the 2020 COVID shutdown, a composite score of at least 2939 for the two taken with a score of proficient on at least one, and no less than basic on the other exam.

• **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:

1. Attainment of an established score on an approved alternate assessment (SAT: 1010; PSAT: 970; ACT: 21; ASVAB: 31)
2. Gold Level on the ACT WorkKeys Assessment
3. 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
4. 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
5. Successful completion of a pre-apprenticeship program
6. Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

Please see pages 86-87 for the infographic provided by the PA Department of Education

• **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:

1. Attainment of an established score on the ACT WorkKeys assessment or an Advanced Placement Program Exam
2. 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
3. Attainment of an industry-recognized credential
4. 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:

1. Satisfactory completion of a service learning project
2. Attainment of a score of proficient or advanced on a Keystone Exam
3. A letter guaranteeing full-time employment;
4. A certificate of successful completion of an internship or cooperative education program
5. Satisfactory compliance with the NCAA Division II core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

• **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. For further explanation of the CTE Pathway, please see PDE's Act 6 guidance.

PORT ALLEGANY HIGH SCHOOL REQUIREMENTS

The minimum requirements for a high school diploma are:

- **24 credits**
- **Successful completion of a Senior Research Project**
- **Courses required:**

English . . . . . 4 credits
English 9, 10, 11, 12 (CP or General)
Social Studies . . . . . 3 credits
United States & Pennsylvania History (CP or General)
World History (CP or General)
Civics and Economics (CP or General)
Math . . . . . 3 credits
***Science . . . . . 3 credits**
Biology (CP or General)
General Science (vocational students)
***Arts or Humanities . . . . . 2 credits**
Includes any art, music, foreign language courses, Business Law, & elective English or social studies courses.
***STEM II (use as a Science or Arts or Humanities) . . . . . .5 credits**
Health . . . . . .5 credits
Safety Education . . . . . .5 credits
Physical Education . . . . . 2 credits
Electives . . . . . 6 credits

- **Keystone Exams: Beginning with the Class of 2023 <u>students must take and score Proficient/Advanced on the Keystone Exams, or complete an alternate pathway as listed in the options on pages 3 & 4 to be eligible for a high school diploma.</u>** Students will be assessed in the following areas:
  - **Biology (students will take this exam as they are completing Biology)**
  - **Literature (students will take this exam in grade 10)**
  - **Algebra (students can expect to take this exam between grades 8-10)**

Remediation (Literature, Algebra, Biology)

- **Only for students who do not reach proficiency on a Keystone Exam.**
- **Students will retake the Keystone Exam.**
- **Students may be provided teacher instruction, remediation packets, or online lessons to address deficiencies in Keystone topics**

There are 4 different programs that students may select. Each of these programs has requirements in addition to the minimum requirements listed above. **Before choosing any of these programs students should seek the advice of their parents or guardians, teachers, and school counselors.**

1. **College Preparatory:** for students who are considering attending a four- or two-year college or university.
2. **College Preparatory/Vocational:** for students who are interested in attending a four- or two-year college or university and are also interested in pursuing a vocation or technical career.
3. **Vocational:** for students who are interested in attending a trade/technical school, other vocational specialty college, & some programs at two-year colleges or pursuing a vocational or technical career immediately upon graduation.
4. **High School**: for students who would like to follow the College Preparatory program, but are unable to manage all College Preparatory classes.

Additional and/or specific requirements for each of the 5 programs are:

College Preparatory:

- 4 credits of College Preparatory/Honors/AP® English courses
- 3 credits of College Preparatory social studies courses
- 3 credits of foreign language (a minimum of 2 credits in one language)
- 4 credits of College Preparatory/Honors/AP® mathematics courses
- 4 credits of College Preparatory/Honors/AP® science courses

College Preparatory Vocational:

- 4 credits of College Preparatory/Honors/AP® English courses
- 3 credits of College Preparatory Social Studies courses
- 3 years of Technology Education or completion of a Vocational Technical program.
- One 3-credit sequence and one 4-credit sequence of College Preparatory/Honors/AP® mathematics and science courses. (Note: this requirement changes to 3 credits in College Preparatory/Honors/AP® mathematics and science courses if the student attends the Career & Technical Center for 3 years.)

Vocational:

- Minimum of 3 years of Technology Education or completion of a Vocational Technical program at Seneca Highlands Career & Technical School.
- A vocational subject must be included in senior year.

High School

- 4 credits English (with successful completion of a Senior Research Project)
- 3 credits Social Studies
- 3 credits Math
- 3 credits Science
- 2 credits Arts & Humanities
- 2 credits Physical Education
- .5 credit STEM II (may be used as Science or Arts or Humanities)
- .5 credit Health
- .5 credit Safety Education
- 5.5 credits electives

May be any combination of College-Preparatory and Non-College Preparatory courses.

HONORS COURSES

An honors course option is available to students in grades 10-12 who are taking college preparatory courses in math, science and English. Honors courses are designed to be academically rigorous and challenging to the highest achieving students in each of these areas. Students should expect a college-level experience in an honors course. A student can take any number of honors courses for which he or she qualifies. Eligible students' parents/guardians will receive a letter detailing which courses the student qualifies for, and the letter must be signed and returned to the School Counseling Office in order for the selected courses to be scheduled.

To qualify for an honors course a student must have obtained a minimum of a 93% average for **four consecutive semesters** in the respective course area in which he or she wishes to qualify.

Twelfth grade honors eligibility will be derived from the student's tenth and eleventh grade course average in that respective study. Eleventh grade honors eligibility will be derived from the student's ninth and tenth grade course average in that respective study. Tenth grade honors eligibility will be derived from the student's eighth and ninth grade course average in the respective study.

Student eligibility for honors courses will be determined **twice** throughout the year. **First**, during the pre-scheduling process, a pool of potentially eligible candidates will be determined. **Second**, after the final (fourth) marking period grades are submitted, students will be scheduled in the respective honors course **if** they have met the criteria, are interested in participating in the honors class(es) for which they have qualified, and a signed letter has been received by the student's parent/guardian. A student **will not** be scheduled for an honors course for which he or she may have previously qualified **if a student achieved at least a 93% average during the pre-scheduling process, but then FAILED TO MAINTAIN at least a 93% average when the fourth marking period is averaged into the equation for the four consecutive semesters.**

Honors courses are weighted if the student achieves at least a C+. A C+ becomes a B- (2.67), a B- becomes a B (3.00), a B becomes A- (3.67), A- becomes A (4.0), and A becomes A+ (4.33). (Please note: There are a few scholarships that require that if a student's grades are weighted, they must become unweighted.

Honors Review Committee:

A student who has not met the qualification for honors courses may request in writing to the High School Principal that he/she would like to enroll in a specific honors course. Notification should be sent to the High School Principal by August 15. At that time, a committee made up of the Superintendent, High School Principal, Guidance Counselor, and Department Heads will convene to review the student's academics as related to enrollment into the Honors course(s).

AVAILABLE HONORS COURSES

Honors English 10	**Honors Chemistry**
Honors English 11	**Honors Physics**
Honors English 12	**Honors Algebra II**
Honors Advanced Biology	**Honors Precalculus**
	Honors Calculus

DUAL ENROLLMENT COURSES

Dual enrollment courses refer to courses that students can take at our high school and earn college credit via an agreement with Pennsylvania Highlands Community College and the University of Pittsburgh at Bradford. In addition, students who are in their fourth semester of the Network Systems Technology or Heavy Equipment programs at the Seneca Highlands Career & Technical Center will have an opportunity to earn three college credits through the Pennsylvania College of Technology. It is imperative for students to realize that colleges must agree to honor dual enrollment credit. Even after completing the form for a dual enrollment course and receiving credit from Pennsylvania Highlands Community College, the University of Pittsburgh, or Pennsylvania College of Technology, it is not a guarantee that a college will honor that credit.

Students must check the transfer policy for each college he or she may be considering attending after high school. Each college has requirements of what it will and will not accept. These requirements may be based on the course you took, the major you plan to take, the grades you achieved, the college giving the dual enrollment credit, course requirements for the college, where you took the dual enrollment course, and limits on the number of courses that can be transferred.

Please refer to each college's transfer policy section (available online), or contact their admissions offices in order to determine if they will accept credit from Pennsylvania Highlands Community College or Penn College of Technology. In some cases colleges have a particular person who deals specifically with dual enrollment questions. Students can also go to the Penn Highlands CC website www.pennhighlands.edu. A helpful website is the PA TRAC (www.PAcollegetransfer.com) (Transfer and Articulation Center). This website allows a student to enter information about the dual enrollment courses by clicking on "Course Equivalencies", then check to see if certain colleges (all state universities and community colleges along with a few other colleges) will accept the transfer and how the college will consider it as a transfer credit.

Most colleges will require an official transcript from Pennsylvania Highlands CC or Penn College of Technology. Transcript request forms for Penn Highlands CC are available online at www.pennhighlands.edu/registration: click on "Registration Forms", then "Transcript Request" or go directly to the transcript form at www.pennhighlands.edu/forms/registration/phcc_transcript_request.pdf or in the School Counseling Office. There is no charge for official transcripts to be sent. Please note that Pennsylvania Highlands was previously named "Cambria County Community College".

Applications for the University of Pittsburgh at Bradford courses are available in the School Counseling office, as well.

DUAL ENROLLMENT COURSES (Cont.)

Dual enrollment courses - Penn Highlands Community College

CAD I & II*^
Computer Applications*^
Vertebrate Anatomy*^

Dual enrollment course - Penn College of Technology through CTC

Auto Mechanics**
Culinary Arts**
Health Assistant**
Heavy Equipment**
Network Systems Tech**

Dual enrollment courses - University of Pittsburgh at Bradford

Advanced Math***
Civics and Economics CP***
Composition I***
Honors Algebra II***
Physics II***
Honors Calculus***
Honors Physics***
Honors Pre-Calculus***
Literature and Interpretation***
Psychology I & II*

*** There are additional requirements for students to receive Dual enrollment college credit for these courses. Check with the Principal's Office.**

**** Dual enrollment through the Career and Technical Center.**

*****Dual enrollment courses (for those enrolled) will be weighted using the Honors grade scale beginning with the Class of 2021. See page 6 for details.**

^ To enroll in Pennsylvania Highlands Community College courses, students may have to complete the COMPASS Placement Test. See School Counselors for information.

AP® (ADVANCED PLACEMENT)

We currently have four Advanced Placement ® courses: AP® English Literature and Composition, AP® Calculus AB, AP® Chemistry, and AP® Computer Science Principles and **are weighted the same as honors courses**. AP® offers 35 courses and exams from a variety of subject areas. More detailed information including complete course descriptions are available by going to www.sat.collegeboard.org and clicking on AP® in the topmost toolbar. AP® courses provide students with the opportunity to challenge themselves with college-level courses. Although an AP® course is not required for a student to be able to take an AP® exam, students may feel better prepared for the exam upon completion of an AP® course. The two to three hour exams are offered once a year in May.

Through AP's® college level courses and exams, students can earn college credit and/or advanced placement. More than 90% of 4-year colleges in the U.S. provide credit and/or advanced placement for qualifying exam scores. To determine a college's AP® criteria including qualifying exam scores, students should check the website for each college they may be considering. Students can also visit AP® section of College Board's website and click on "AP® Credit and Placement". To begin your search you can either type in the name of the college or click on the first letter of the college's name. You should find a link that will take you directly to the AP® policy for that particular college. Keep in mind that the college's evaluation of the credits awards for AP® exams is subject to change and may be reviewed and revised periodically so it is important to check with colleges frequently.

To determine if you should consider taking one of the AP® courses, the College Board has a tool called "AP® Potential" that helps identify students who are likely to succeed on AP® exams. College Board research shows strong correlations between student's PSAT/NMSQT scores and AP® exam results. "These studies show that PSAT/NMSQT scores are strong predictors of students' AP® Exam scores, when used in conjunction with . . . high school grades, grades in previous same-discipline course work, and the number of same-discipline (ex. English, math) courses a student has taken, can serve to provide reliable guidance in identifying additional students who may be ready for the rigor of AP®." (College Board website: professionals). Students who took the PSAT/NMSQT in October can see one of the school counselors to find out his or her AP® potential. However, it is important to keep in mind that although AP® potential is a strong indicator, it only accounts for part of the factors that determine a student's AP® exam score. Other important factors include: "individual student motivation and preparation, parental support, and teacher efficacy." (College Board website: professionals).

Please Note: In order to possibly qualify for college credit, a student must take and achieve a certain score on the AP® exam for the course.

Advantages of taking an AP® course and exam:

- Earn college credit and advanced placement
- Be more notable in the college admissions process
- Gain skills that will help you succeed in college
- Expand your intellectual scope
- Possibility of earning recognition through the AP® Scholar Awards (not a monetary award)

AP® (ADVANCED PLACEMENT) continued

AP® Calculus AB: is a course designed to prepare students for the AP® Calculus AB exam given by the College Board in May each year. The course will cover all topics of a college level Calculus I course as outlined in the AP® Calculus AB curriculum. The course is designed to be taught over a full high school academic year. However, some review and preparatory work must be done during the summer months before entering class in the fall. Before studying AP® Calculus AB, all students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. **(Prerequisite: Pre-Calculus or Honors Pre-Calculus)**

AP® Chemistry: is a course designed to be the equivalent of the general chemistry course taken during the first year of college. Students will gain an in-depth understanding of the fundamentals of chemical and mathematical problem solving. A large portion of the course will involve laboratory activities that would be comparable to a college level laboratory experience. The course will focus on the six Big Ideas of AP® Chemistry. (See page 61 for complete details of the Big Ideas.) Upon completion of the course, students will have the opportunity to take the AP® Chemistry exam which is traditionally administered in May. (**Prerequisite: Successful completion of Chemistry I.) (Grades 11-12)**

AP® Computer Science Principles: This course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. AP® Computer Science Principles introduces you to the essential ideas of computer science with a focus on how computing can impact the world. Along with the fundamentals of computing, you will learn to analyze data, information, or knowledge represented for computational use; create technology that has a practical impact; and gain a broader understanding of how computer science impacts people and society. You will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. Students taking this course may receive college credit through passing the through-course assessment and the AP® exam at the end of the year. (**Prerequisite: Successful completion of Algebra II)**

AP® English Literature and Composition: This course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. **(Grade 12) (Prerequisite: College Prep or Honors English)**

AP® Human Geography: Explore how humans have understood, used, and changed the surface of Earth. You'll use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. You will gain an understanding about information shown in maps, tables, charts, graphs, infographics, images, and landscapes, and you will connect geographic concepts and processes to real-life scenarios. **(Grades 10-12)**

Please note: In order to possibly qualify for college credit, a student must take and achieve a certain score on the AP® exam for the course.

Four-year plans

Programs at Port Allegany High School

COLLEGE PREPARATORY

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English 9 CP	English 10 CP/Hon	English 11 CP/Hon	English 12 CP/Hon/AP
USPA History CP	World History CP	Civics & Economics CP	Physical Education
Biology CP	Chemistry/Hon	Physics I/Honors	Calculus/Calc.Hon/AP
Geometry/Algebra 9 CP	Algebra II/Hon	Pre-Calc./Hon/Alg II	Discrete (1)/Pre-Calc/
French or Spanish	or Geometry	French or Spanish	Advanced Math
STEM II	French or Spanish	Physical Education	At least 1 Adv. Science:
Physical Education	Safety Ed	Health	Vertebrate Anatomy,
Arts or Humanities (1 cr.)	Physical Education	Electives*	Advanced Chemistry,
Electives*	Electives*		Physics II, AP
			Chemistry or
			Honors Adv. Biology

*College Prep students also need at least 1.5 additional credits of electives.

COLLEGE PREPARATORY/VOCATIONAL

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English 9 CP	English 10 CP/Hon	English 11 CP/Hon	English 12 CP/Hon/AP
USPA History CP	World History CP	Civics & Economics CP	Physical Education
Biology CP	Chemistry/Hon	Physics I/Honors	CP Math or Science (1):
Algebra 9 CP/Geometry	Algebra II/Hon	Pre-Calc/Hon/Algebra II	Calculus/Calc.Hon./AP,
STEM II	or Geometry	Physical Education	Discrete Math,
Physical Education	Safety Ed	Voc. Tech Ed	Advanced Math, or
Voc. Tech Ed Wood I	Physical Education	Health	Pre-Calculus,
(Voc. Tech Ed must take	Voc. Tech Ed	Electives*	Physics II,
at least .5 credits of Arts)	Electives*		Advanced Chemistry,
			Honors Adv. Biology,
			or Vert. Anatomy
			or Humanities
			Voc. Tech Ed Electives*

*College Prep/Vocational Tech Ed. students need at least 4.0 additional credits of electives.

COLLEGE PREPARATORY/VOCATIONAL-TECHNICAL

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English 9 CP	English 10 CP/Hon	English 11 CP/Hon	English 12 CP/Hon/AP
USPA History CP	Chemistry/Hon	World History CP	Physics I/ Hon
Biology CP	Algebra II/Hon	Pre-Calc. or Alg II/Hon	Civics &
Geometry/Algebra 9 CP	or Geometry	Health 11	Economics CP
STEM II	Safety Ed	Physical Education	Physical Education
Physical Education	Physical Education	Career/Technical	Career/Technical
Requirements from:	Career/Technical	Center	Center
College Prep or	Center		
College Prep/Business or			
College Prep/Vocational			

**College Preparatory/Vocational-Technical Health Assistant students have an additional CP Math or Science requirement.

College Preparatory classes can be substituted for any math, science, English, or Social Studies requirements.

Four-year plans (Cont.)

Programs at Port Allegany High School

VOCATIONAL**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English 9*	English 10*	English 11*	English 12*
USPA History*	World History*	Civics & Economics*	Physical Education
General Science*	Biology*	Geometry*	Voc. Tech Ed
Algebra Concepts 9*	Algebra Concepts 10*	or Tech Math III	Humanities electives
Physical Education	or Tech Math II	Health	if needed
STEM II	Safety Ed	Physical Education	Electives**
Voc. Tech Ed Wood I**	Physical Education	Voc. Tech Ed	
***Voc. Tech Ed students	Voc. Tech Ed	Science (1 semester	
must take at least .5 credits		11 or 12)*	
Arts or Humanities		Electives**	

*College Preparatory classes can be substituted for any math, science, English or social studies requirements.
**Vocational Technical Education students need at least 5.5 additional credits of electives.

CAREER & TECHNICAL EDUCATION

Programs at Seneca Highlands Career & Technical Center

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English 9*	English 10*	English 11*	English 12*
USPA History*	Algebra Concepts 10*	Health	Civics & Economics*
General Science*	or Tech Math II	Geometry*	Science
Algebra Concepts 9*	Biology*	or Tech Math III	(1 semester)*
Physical Education	Physical Education	World History*	Physical Education
STEM II	Safety Ed	Career/Technical	Career/Technical
Requirements from:	Physical Education	Center	Center
College Prep or	Career/Technical Center	Electives**	Humanities electives
College Prep/Vocational or			if needed
Vocational			

*College Preparatory classes can be substituted for any math, science, English, or social studies requirements.
**Health Assistant is a two-year program and may need up to an additional 2 credits of electives.

Scheduling procedures

· Each student will pre-schedule (request courses) for the next school year with one of the counselors.

· Each student is advised that requests made during pre-scheduling **<u>are not guaranteed.</u>** In some cases, there must be a minimum number of students selecting a certain course in order for it to be offered. Additionally, a course may be offered during a period that cannot be accommodated in the student's schedule of required courses.

· Each student is required to schedule a minimum of **35 periods** per week in some course areas. (Minimum of **7 periods** per day each semester.) Any exception to this practice will require the approval of the High School Principal.

· Each student will be given a list of requirements for the next school year based on needs for graduation and program criteria.

· Each student will be provided with any recommendations from their current teachers along with a list of their selected courses and alternates which they are encouraged to share with their parents or guardians.

· All eighth grade students must have a parent or guardian signature on their course selection sheet.

· Any student in grades 9 through 11 who is considering a program change must schedule an appointment with one of the school counselors to review options available. If, at the conclusion of this appointment, the student still wishes to move forward with a course change, a change of curriculum permission slip will be filled out and must be signed by a parent or guardian. The school counselor may possibly make written comments or request a meeting with the parents or guardians about the proposed change.

· Any student considering a course change must schedule an appointment with one of the school counselors. If, at the conclusion of this appointment, the student still wishes to move forward with a course change, a change of curriculum permission slip will be filled out and must be signed by a parent or guardian. The school counselor may possibly make written comments or request a meeting with the parents or guardians about the proposed change. The school counselor may also require the student to get a signature from a teacher or teachers involved with the proposed change.

· **All schedule changes should be made within the first 10 days of the beginning of the course. Exceptions to this will be made on a case-by-case basis and will need the approval of the principal.**

· Teacher input will be solicited when students are choosing and changing courses and programs.

· Teacher recommendations for students' courses or program selections and changes are encouraged. This information will be shared with the students and parents.

9th GRADE COURSES & ELECTIVES

* HAVE PREREQUISITES (REFER TO COURSE DESCRIPTIONS)
(N) COURSE MEETS NCAA ELIGIBILITY STANDARDS (see pages 87 - 90)

10th – 12th GRADE ELECTIVES

COURSE	GRADE	PAGE
ADVANCED CHEMISTRY* (N)	12	61
ADVANCED MATH	12	44
ADVANCED STEM	10, 11, 12	46 & 63
ALGEBRA II	11, 12	44
ALGEBRA CONCEPTS 10	10, 11, 12	43
AMERICAN CIVIL WAR, THE	10, 11, 12	83
AP® CALCULUS AB DE*	12	11 & 45
AP® CHEMISTRY	11, 12	11 & 61
AP® COMPUTER SCIENCE PRINCIPLES	11, 12	11, 40, 46
AP® ENGLISH LIT AND COMP 12 DE*	12	11 & 28
AP® HUMAN GEOGRAPHY	10, 11, 12	83
ART I, II*, III*, IV*	10, 11, 12	23
ASTRONOMY (N)	11, 12	63
AUTOMOTIVE MECHANICS DE* **	10, 11, 12	71
BAND	10, 11, 12	33
BASIC ELECTRONICS	11, 12	63
BUILDING CONSTRUCTION OCCUPATIONS**	10, 11, 12	71
BUSINESS LAW	11, 12	38
CABINET MAKING*	11, 12	67
CALCULUS* (N)	12	44
CHEMISTRY* (N)	10, 11, 12	58
CHEMISTRY & SOCIETY	11, 12	63
CHORUS	10, 11, 12	34
CIVICS AND ECONOMICS	11, 12	82
COMPUTER AIDED DESIGN I	10, 11, 12	68
COMPUTER AIDED DESIGN II DE*	10, 11, 12	68
COMPUTER APPLICATIONS DE*	10, 11, 12	38
CONTEMPORARY AMERICAN HISTORY (N)	10, 11, 12	83
CREATIVE WRITING*	11, 12	30
CULINARY ARTS DE* **	10, 11, 12	50
CULTURAL ANTHROPOLOGY (N)	10, 11, 12	83
DISCRETE MATH (N)	11, 12	45
DRIVER'S/SAFETY EDUCATION	10, 11, 12	80
EARLY CHILDHOOD EDUCATION	10, 11, 12	51
ENGINEERING TECHNOLOGY ***	10, 11, 12	72
ENGLISH 10/CP/Honors (N)	10	25 - 27
ENGLISH 11/CP/Honors (N)	11	25 - 27
ENGLISH 12/CP/Honors (N)	12	25 - 27
ENGLISH COMPOSITION I DE	11, 12	28
ENVIRONMENTAL SCIENCE*	10, 11, 12	63
FIELD BIOLOGY*	10, 11, 12	64
FILM STUDIES	11,12	30
FORENSIC SCIENCE*	12	64
FRENCH I, II, III, IV (N)	10, 11, 12	77
GEOMETRY (N)	9, 10	44
GENERAL BIOLOGY	10, 11, 12	58

* HAVE PREREQUISITES (REFER TO COURSE DESCRIPTIONS)
** OFFERED AT SENECA HIGHLANDS CAREER & TECHNICAL CENTER
DE: DUAL ENROLLMENT; STUDENTS CAN OBTAIN COLLEGE CREDIT FOR THIS COURSE
DE*: DUAL ENROLLMENT; ADDITIONAL REQUIREMENTS APPLY. CHECK WITH PRINCIPAL
(N) COURSE MEETS NCAA ELIGIBILITY STANDARDS (see pages 87 - 90)

10th – 12th GRADE ELECTIVES (Cont.)

COURSE	GRADE	PAGE
GUITAR I, II	10, 11, 12	33
HEALTH ASSISTANT DE* **	10, 11, 12	54
HEALTH 11	11	53
HEAVY EQUIPMENT MAINTENANCE TECH (DE)**	10, 11, 12	72
HOMELAND SECURITY	10, 11, 12	79
HONORS ADVANCED BIOLOGY* (N)	12	60 & 62
HONORS ALGEBRA II DE*	10, 11	45
HONORS CALCULUS DE* (N)	12	45
HONORS CHEMISTRY* (N)	10, 11	60
HONORS PHYSICS DE* (N)	11, 12	60
HONORS PRE-CALCULUS DE* (N)	11, 12	46
INDEPENDENT ART STUDY*	10, 11, 12	23
INSTRUMENTAL MASTER CLASS	10, 11, 12	32
INTRO TO ENGINEERING 9-10	10, 11, 12	69
INTRO TO ENGINEERING 11-12	11, 12	69
INTRO TO PROGRAMMING	10, 11, 12	47
INTRO TO PROGRAMMING II	10, 11, 12	47
INVESTIGATIVE TECHNIQUES	10, 11, 12	64
INVESTIGATIVE TECHNIQUES II	10, 11, 12	64
JOURNALISM (N)	10, 11, 12	30
KEYSTONE REMEDIAL BIOLOGY	10, 11, 12	65
KEYSTONE REMEDIAL LITERATURE	11, 12	29
KEYSTONE PROJECT BASED ASSESSMENT	11, 12	5 & 29
LITERATURE AND INTERPRETATION DE	11, 12	28
MANUFACTURING SYSTEMS*	10, 11, 12	67
MEDIA STUDIES	10, 11, 12	30
MONEY $MART	11, 12	38
MUSIC TEACHER ASSISTANT	11, 12	32
MUSIC THEATRE WORKSHOP	10, 11, 12	32
MUSIC THEORY & COMPOSITION	10, 11, 12	32
NETWORK SYSTEMS TECHNOLOGY** DE	11, 12	40
PERCUSSION ENSEMBLE	10, 11, 12	33
PHYSICAL EDUCATION 9/10 & 11/12	10, 11, 12	53
PHYSICAL & CULTURAL GEOGRAPHY	10, 11, 12	83
PHYSICS I* (N)	11, 12	58
PHYSICS II DE* (N)	12	59 & 62
PIANO I, II, III, IV	10, 11, 12	32
PRE-CALCULUS DE (N)	11, 12	44

* HAVE PREREQUISITES (REFER TO COURSE DESCRIPTIONS)

** OFFERED AT SENECA HIGHLANDS CAREER & TECHNICAL CENTER

DE: DUAL ENROLLMENT; STUDENTS CAN OBTAIN COLLEGE CREDIT FOR THIS COURSE

DE*: DUAL ENROLLMENT; ADDITIONAL REQUIREMENTS APPLY. CHECK WITH PRINCIPAL

(N) COURSE MEETS NCAA ELIGIBILITY STANDARDS (see pages 87 - 90)

10th – 12th GRADE ELECTIVES (Cont.)

COURSE	GRADE	PAGE
PSYCHOLOGY I DE* (N)	11, 12	84
PSYCHOLOGY II DE* (N)	11, 12	84
ROBOTICS 101	10, 11, 12	69
SCIENCE RESEARCH (N)	12	64
SENIOR HIGH REMEDIAL ENGLISH	10, 11, 12	29
SOCIOLOGY I (N)	10, 11, 12	84
SOCIOLOGY II (N)	10, 11, 12	84
SPANISH I, II, III, IV (N)	10, 11, 12	78
STEM II	10, 11, 12	59 & 68
SURVEY OF MUSIC	10, 11, 12	32
TECH MATH II	10, 11, 12	43
TECH MATH III	10, 11, 12	43
VERTEBRATE ANATOMY DE* (N)	11, 12	62
VOCATIONAL CO-OP	12	80
VOCAL ARTS I, II*, III*, IV*	10, 11, 12	32
WELDING**	10, 11, 12	73
WILDLIFE ECOLOGY* (N)	10, 11, 12	65
WOMEN IN AMERICAN HISTORY	10, 11, 12	85
WOOD I	10, 11, 12	67
WOOD II	10, 11, 12	67
WORD PROCESSING I, II, III	10, 11, 12	38
WORD PROCESSING IV*	10, 11, 12	39
WORLD HISTORY/CP	10, 11	82
YEARBOOK*	10, 11, 12	38
YOUNG ADULT LITERATURE II	10, 11, 12	30

* HAVE PREREQUISITES (REFER TO COURSE DESCRIPTIONS)

** OFFERED AT SENECA HIGHLANDS CAREER & TECHNICAL CENTER

DE: DUAL ENROLLMENT; STUDENTS CAN OBTAIN COLLEGE CREDIT FOR THIS COURSE

DE*: DUAL ENROLLMENT; ADDITIONAL REQUIREMENTS APPLY. CHECK WITH PRINCIPAL

(N) COURSE MEETS NCAA ELIGIBILITY STANDARDS (see pages 87 - 90)

CAREER PATHWAYS

What are Career Pathways?

Career Pathways are clusters of occupations/careers that are grouped together because the people in that cluster share similar interests, talents, and abilities.

Port Allegany Pathways are:

- Arts & Communications
- Business, Management, & Mathematics
- Culinary, Health, & Recreation
- Social, Human, & Governmental Sciences
- Science & Technology

Choosing a Career Path

Career Pathways are designed for students to explore and to prepare for related careers in a broad field. Students should select courses which blend their interests and abilities, and lead to the achievement of personal, educational, and career goals. Students will not be locked into a pathway, but will be encouraged to explore all available opportunities.

What does the Career Pathway System offer for students?

- A career development plan for all students, regardless of their interests, abilities, talents, or desired level of education
- Basic skills for all students, regardless of the level of education or training they choose to attain
- A variety of specific occupational choices, each requiring a different level of education and training
- A way for students to discover the relevance of their selected school courses to actual occupations and careers
- An opportunity for students to assess their own performance, improve where necessary, and attain personal career goals

What are some supplemental activities for students to explore Career Paths?

- Job shadow
- Volunteer
- Enter information in and explore www.educationplanner.org
- Take a career interest survey through education planner website
- Virtual job shadow at www.jobshadow.monster.com
- Schedule an appointment with one of the school counselors

ARTS & COMMUNICATIONS

- **Interests and Abilities typical of this path**

Are you . . .

. . . creative?
. . . innovative?
. . . flexible?

Do you have . . .

. . . artistic ability?
. . . musical ability?
. . . physical/manual dexterity?
. . . good oral and/or written communication skills?

Do you like to work . . .

. . . independently?
. . . in self-directed situations?
. . . with other people?

Do you like to express your feelings/ideas . . .

. . . visually?
. . . in writing?
. . . by performing?

Do you enjoy . . .

. . . artistic activities?
. . . musical activities?
. . . making speeches or debating?
. . . solving problems?
. . . manipulating electronics equipment?

Entry Level Careers

These careers require on-the-job training and/or minimal training:

Artist
Freelance Writer
Dancer
Disc Jockey
Bookbinder
Stagehand
Music Copier
Announcer
Floral Designer
Photojournalist
Model
Sound Technician
Lighting Technician
Reprographic Worker
Motion Picture Projectionist
Merchandise Displayer
Photographer' Assistant
Actor/Actress
Singer
Darkroom Technician
Telemarketer
Seamstress
Lithographic Worker
Telephone Operator

Semi-Professional Careers

These careers generally require Technical/Community College and/or experience:

Ceramists
Graphic Artist
Copywriter
Photographer
Comedian
Screenwriter
Proofreader
Fabric Artist
Computer Artist
Broadcast Technician
Fashion Designer
Television Script Writer
Public Safety Telecommunicator
Music Video Producer
Recording Engineer
Interpreter for Hearing Impaired
Cartoonist
Journalist
Interior Designer
Commercial Artist
Craftsperson
Costumer
Film Editor
Layout/Past-up Artist

Skilled & Professional Careers

For most of these careers you must successfully complete college/university entrance requirements. These careers generally require specialized schools or colleges/universities and experience:

Composer
Critic
Playwright
Sculptor
Art Director
Publisher
Camera Operator
Manager
Director
Art Teacher
Music Librarian
Conductor
Advertising Copywriter
Desktop Publisher
Scriptwriter
Sign Language/Oral Interpreter
Art Restorer
Cable Television Engineer
Literary & Theatrical Agent
Producer
Graphic Arts
Music Teacher
English/Language Arts Teacher
Composer
Choreographer
Industrial Designer
Landscape Architect
Fiction Writer
Editor
Makeup Artists
Public Relations
Choral/Instrumental
Management
Architect
Drama Teacher
Instrumentalist

Art

COURSE	GRADE	LENGTH	CREDIT
Art I	9, 10, 11, 12	semester	.5
Art II	*9, 10, 11, 12	semester	.5
Art III	10, 11, 12	semester	.5
Art IV	11, 12	semester	.5
Independent Art Study	10, 11, 12	semester	.5

*** If Art I is taken 1st semester in grade 9.**

ART ELECTIVES

Art I (731) semester .5 credits

Art I is a developmental course in which the skills and techniques acquired in seventh grade art and history are explored in more depth. A wide variety of artist-quality materials including; clay, wire, wood, colored pencil, pastel, acrylic paints, illustration and canvas board will be available to allow students to explore design possibilities. Students will also explore common themes in contemporary art by completing a student sketchbook. Students will also explore styles in art history from past to present. Students will learn to mat their work.

Art II (732) semester .5 credits

Drawing and graphic expression are stressed. Pencil, Clay slab construction, and oil painting are the major concentrations. Two dimensional design principles are refined and art history is touched upon. Printmaking is explored in depth; techniques of modern art may be explored. Students will gain experience in using an artist-quality mat cutter. Drawings are more finished and the final product becomes important.
(Prerequisite: Art I)

Art III (733) semester .5 credits

Composition, idea, and theme are considered in depth. The student should evaluate himself/herself for effectiveness of production. Students will continue to develop their personal styles using a variety of media including watercolor, ceramic clay, and pencil. Larger formats are stressed. Dramatic light sources and developing sensitivity to depicting a high degree of contrast will be emphasized. Painting on a stretched canvas, digital art, and photography will be explored as well.
(Prerequisite: Art I)

Art IV (734) semester .5 credits

This is an advanced level course insofar as execution of personal expression. It includes all media, art history, and individual approaches. Students with art as a career choice are given the opportunity to further develop personal styles. All available media will be accessible for students to realize their artistic vision. Provision is made for the student's selection of subject matter. Students have the opportunity to mat and frame their work.
(Prerequisite: Art I)

Independent Art Study (735) semester .5 credits

Some art students who cannot otherwise fit an elective course into their schedules may choose an independent study. At least three independent projects must be completed each grading period. The student-artist has an opportunity to concentrate on selected media or pursue an individual style. **(Prerequisite: Art I) An Independent Study must be approved by the instructor. Independent Studies will be limited to 4-students total per semester.**

ENGLISH

COURSE	GRADE	LENGTH	CREDIT
Composition I (DE) [N]	**11, 12**	**year**	**1.0**
Creative Writing	**11, 12**	**semester**	**.5**
English Composition I* (DE)	**11, 12**	**year**	**1.0**
English 9	**9**	**year**	**1.0**
English 10	**10**	**year**	**1.0**
English 11	**11**	**year**	**1.0**
English 12	**12**	**year**	**1.0**
English 9 CP [N]	**9**	**year**	**1.0**
English 10 CP [N]	**10**	**year**	**1.0**
English 11 CP [N]	**11**	**year**	**1.0**
English 12 CP [N]	**12**	**year**	**1.0**
AP® English Composition & Lit* (DE) [N]	**12**	**year**	**1.0**
Honors English 10* [N]	**10**	**year**	**1.0**
Honors English 11* [N]	**11**	**year**	**1.0**
Honors English 12* [N]	**12**	**year**	**1.0**
Journalism	**10, 11, 12**	**semester**	**.5**
Literature and Interpretation* (DE) [N]	**11, 12**	**year**	**1.0**
Media Studies	**10, 11, 12**	**semester**	**.5**
Senior High Remedial English	**10, 11, 12**	**semester**	**1.0**
Keystone Literature Remedial	**11, 12**	**semester**	**.5**
Young Adult Literature II	**9, 10, 11, 12**	**semester**	**.5**
Project Based Assessment-- Literature	**11, 12**	**semester**	**.5**

***Weighted course**
(DE) Dual Enrollment
[N] NCAA Core Courses

DE: Dual enrollment course. Students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet is available in the Principal's Office. Students can also obtain college credit through the University of Pittsburgh at Bradford. Information is available in the School Counseling Office.

ENGLISH COURSES

English 9 **year** **1 credit**

Using a thematic approach, students will read a variety of literature including poetry, short story, nonfiction, novel and drama. Students will write narrative, argumentative and informative pieces. Conventions will focus on the practical application of the English language in writing and speaking. Word meaning, usage, vocabulary and literary concepts and other writing conventions are taught throughout the year. Students will be required to read independently. Students will conduct research projects and initial career research exploration. Accelerated reader expectations are 2 books per quarter.

English 10 **year** **1 credit**

Students will study a variety of genres of literature based on a thematic approach. The main text of the course has an integrated approach to literature and language combining reading, analysis, writing, grammar, vocabulary acquisition, and cross-media. A writer's workshop approach will be used for all writing pieces: narrative, argumentative and expository/informative. Students will have an independent reading expectation each quarter. Students will also research an independent topic. Accelerated reader expectations are 2 books per quarter.

English 11 **year** **1 credit**

Students study poetry, nonfiction, short stories, drama, and novels by American authors. Emphasis is on reading, writing and speaking through an integrated text. The historical development of American literature and language is traced from the early Colonial American works to contemporary American literature and examines the impact of American society on writing. While developing the characteristics of effective writing, students are provided a guided research experience that contains all standard research components. Writing and reading skills are emphasized. Independent reading throughout each grading period is required for this course that may be assessed in literacy quizzes (i.e. Accelerated Reader), reports papers, and other means to determine proficiency.

English 12 **year** **1 credit**

Students will study poetry, fiction, nonfiction, drama, and novels by British and world authors. This course offers an overview of British literature as it reflects period history and the impact that society and the author have on each other. There is an emphasis on the development of the English language and a review of grammar, mechanics, usage, and style. Students will write in a variety of situations including a research project. There are independent reading requirements every marking period. Requirements and assessments may vary each quarter and are not limited to Accelerated Reader, report, reaction paper, or speech.

COLLEGE PREPARATORY ENGLISH COURSES

English 9 CP (College Preparatory) (31) year 1 credit

Through a variety of literary works, students will express their understanding of literary concepts in rigorous analysis of writing styles, themes and content. Students will write essays that will focus on purpose, audience, style, conventions, and content. Literature will include short stories, poetry, the novel, nonfiction, drama, and Shakespeare. Students will be required to read independently in collaboration with U. S. History. Students will conduct formal research utilizing an MLA style to write a paper**. Students have an Accelerated Reader expectation of 3 books per quarter.**

English 10 CP (College Preparatory) (41) year 1 credit

The course will build upon the College Preparatory English 9. Students will study all genres of literature in a thematic and integrated approach for literature. Literature will include short stories, poetry, the novel, nonfiction, drama, and Shakespeare. Emphasis in the course will be placed upon writing/responding to literature, vocabulary acquisition, and independent skill development in various areas. A Writer's Workshop will be utilized for guided assignments such as: narrative responses, persuasive paper(s), and critical analysis of setting, character, author purpose, and/or theme. An expectation for writing a guided research paper will be expected of each student. Students will also create and investigate topics associated with the novel study as assigned. **Students have an Accelerated Reader expectation of 3 books per quarter.**

English 11 CP (College Preparatory) (51) year 1 credit

Students study poetry, nonfiction, short stories, drama, and the novel by American authors. The historical development of American literature and language is traced from the early Colonial American works to contemporary American literature and examines the impact of American society on writing. Writing, reading, listening and speaking skills are emphasized in style, tone as well as content using an integrated text. Students will complete a guided research project that attempts to prepare them for the independent research conducted their senior year. Independent reading throughout each grading period is required for this course that may be assessed in literacy quizzes (i.e. Accelerated Reader), reports, papers, or other means to determine proficiency.

English 12 CP (College Preparatory) (61) year 1 credit

Students will study poetry, fiction, nonfiction, drama, and novels by British and world authors. This course offers an overview of British literature as it reflects period history and the impact that society and the author have on each other. There is an emphasis on the development of the English language as it relates to the literary/social/historical issues. Students are expected to develop a critical view. Students will review/use grammar, mechanics, usage, and style in a variety of writing, speaking, and listening situations. The research process is utilized through a student-driven project. Some outside reading is required. The scope of the class is designed to help the student prepare for college level work. There are independent reading requirements every marking period. Requirements and assessments may vary each quarter and are not limited to Accelerated Reader, report, reaction paper, or speech.

HONORS & AP® ENGLISH COURSES

Honors English 10 (40) year 1 credit

The course will build upon the College Preparatory English 9. Students will study all genres of literature in a thematic and integrated approach for literature. Emphasis in the course will be placed upon writing/responding to literature, vocabulary acquisition, and independent skill development in various areas. A Writer's Workshop will be utilized for guided assignments such as: narrative responses, persuasive paper(s), and critical analysis of setting, character, author purpose, and/or theme. Students will also create and investigate topics associated with the novel study as assigned. Students will have a variety of independent reading projects per quarter as well as a regular reading requirement. **Students have an Accelerated reader expectation of 4 books per quarter with 1 having to be from the college-bound list. Weighted course. Students must meet eligibility criteria or get approval from the Honors Review Committee to enroll in this course.**

Honors English 11 (50) year 1 credit

This course will build upon the College Preparatory English 11. This course follows a chronological approach to American literature with an emphasis on analyzing the effects of historical events on various literary genres and American Society. Each semester will focus on research-oriented studies and provide opportunities for students to demonstrate their language arts abilities through presentations, discussions, and compositions. Writing will progress from thematic and expository compositions to in-depth literary analysis. Readings from a supplemental list will enhance understanding of assignments and is required of students in this course. Independent reading throughout each grading period is required for this course that may be assessed in literacy quizzes (i.e. Accelerated Reader), reports, papers, or other means to determine proficiency. **Weighted course. Students must meet eligibility criteria or get approval from the Honors Review Committee to enroll in this course.**

Honors English 12 (60) year 1 credit

This course is built upon the College Preparatory English 12 course. As in that course, students study poetry, fiction, non-fiction, drama, and novels by British and world authors. This course offers an overview of British literature as it reflects period history and the impact that society and the author have on each other. Students are expected to develop a critical view through writing/discussing writers' works. There is an emphasis on the development of the English language as it relates to the literary/social/historical issues. Students will review/use grammar, mechanics, usage, and style in a variety of writing/speaking/listening situations. The research process is utilized through a student driven project and related multi-media group presentation. Students are assigned independent reading and writing coursework. The scope and pace of the class is designed to help the student prepare for college level work and attempts to challenge their level of achievement. There are independent reading requirements every marking period. Requirements and assessments may vary each quarter and are not limited to Accelerated Reader, report, reaction paper, or speech. **Weighted course. Students must meet eligibility criteria or get approval from the Honors Review Committee to enroll in this course.**

Additional College Prep English Courses

AP® English Literature & Composition (062) **year** **1 credit**

This course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. **(Grade 12) (Prerequisite: College Prep or Honors English) Weighted course.**

English Composition I (063) **year** **1 credit**

This is a College-in-High-School dual-enrollment course offered in conjunction with the University of Pittsburgh at Bradford and is open to all students in 11th or 12th grade who have successfully attained the Proficient level on the Keystone Literature exam. This course is aligned with Pitt/Bradford's ENG 0101 (described as "focus[ing] on the writing process and on the kinds of writing common in the academic disciplines"). In addition to developing the appropriate analysis, writing, grammar usage, and revision skills associated with the various types of essays, this course contains a research component that meets the district's requirements. There are independent reading requirements every marking period. **(Grades 11-12) Must score Proficient/Advanced on the Keystone exam for consideration. Students can also obtain college credit through the dual enrollment program. Weighted course.**

Literature and Interpretation (064) **year** **1 credit**

This course is a dual enrollment course offered through the University of Pittsburgh at Bradford that will examine the ways in which meaning is created in both literary and non-literary texts with an introduction to some of the methods of literary interpretation. The course will examine common literary devices and literary concepts such as genre, narrative, character and figurative language. Students will use these concepts to consider the interaction among the reader, the writer, and the text. The students will also be required to complete a research project and independent reading assignments. **(Grades 11-12) Must score Proficient on the Keystone exam for consideration. Students can also obtain college credit through the dual enrollment program. Weighted course.**

Remedial English

Senior High Remedial English (39) semester 1 credit

This remedial course is intended for students who have not attained the basic level of proficiency as measured by the passing grade used at our school. Students may elect to take this semester course to attain credit for **one full** course credit. This remedial course is equipped to bolster students' reading and writing proficiencies at the grade levels 10-12. Students will use a specific core text, novels, and other material chosen by the teacher. The course will utilize assessment and PSSA skill material. The PSSA skill development will integrate anchor skills. It is important to note this course is aimed at remediation in one full-year course; it is **not** intended to act as compensation for failing other grade levels in English. **A student may elect to take this course only once**. Students are required to do the daily work and perform any writing projects that would be required during the regular full-year course. Independent reading will also be required. This expectation will need to be maintained along with your regular English teacher. A discussion about Accelerated Reader requirements needs to occur **prior to due dates! (This course is not allowed to replace a College Prep English requirement.) (Grades 10-12)**

Remedial English (Continued)

Keystone Remedial Literature semester .5 credit

This remedial class will offer students instruction, review and practice of the eligible content for the Keystone test in Literature. The class is designed for students who do not demonstrate proficiency on the Keystone test in Literature. **(Grades 11-12)**

Keystone Project Based Assessment – Literature semester .5 credit

Students who do not score proficient/advanced on the Keystone Literature Exam have the opportunity to take a project based assessment. This project, if passed, will meet the graduation criteria from the Pennsylvania Department of Education. Please see your school counselor for more information. **(Grades 11-12)**

ENGLISH ELECTIVES

Journalism (93) semester .5 credit

This course introduces students to print and online media, video and broadcast. The history of journalism, laws, ethics, news literacy and internet and social media responsibility will complement units of study. Students will gather information and write hard news, features, sports and opinion articles. Photojournalism and broadcast news will be introduced and explored. **(Grades 10-12)**

Creative Writing (97) semester .5 credit

In Creative Writing, students will explore techniques in writing short stories, drama and poetry. They will read examples of each genre and write using the conventions of that particular genre. They will explore their own writing process and will be required to put together a portfolio of their work. By the end of the class, students will be able to use various techniques and apply literary devices in their own writing. **(Prerequisite: English 10) (Grades 11-12)**

Media Studies semester .5 credit

This course introduces students to state-of-the-art technology geared towards media. The students will learn to use video editing software, soundboards, script writing programs, audio equipment, tricasters, and much more.

Students will use this technology to create multimedia presentations by writing scripts, hosting interviews, gathering footage, and much more. The goal being, to teach students the skills to use technology to create media in a media driven world. **(Grades 7 – 12)**

Young Adult Literature II semester .5 credit

In Young Adult Literature II, students will have an opportunity to read several different novels from a variety of genres with the instructor and peers. Students will analyze the novels and discuss the plot, character, setting, and theme of each novel in a literature circle approach. Students will also have an opportunity to develop a self-selected project with critical analysis of a novel in a specific young adult genre. Through a variety of projects utilizing media and technology students will present novels as well as discuss the role of the novel in today's young adult modern life. **(Grades 9-12)**

Film Studies semester .5 credit

In Film Studies, students will use this class to expand their appreciation and enjoyment of a wide range of films. Students will learn technical and theoretical vocabulary of film analysis, and they will use this theory to analyze and react to several short films and major motion pictures through the duration of the course. Historical and sociological aspects will be incorporated into the analysis of classic and contemporary films. Assessments will be made through discussions, essays, tests, and projects. **(Grades 11 - 12)**

MUSIC

COURSE	GRADE	LENGTH	CREDIT
Band (9th Grade)	9	year	.5
Band (Senior High)	10, 11, 12	year	.5
Chorus (9th Grade)	9	year	.5
Chorus (Senior High)	10, 11, 12	year	.5
Guitar I	9, 10, 11, 12	semester	.5
Guitar II	9, 10, 11, 12	semester	.5
Instrumental Master	9, 10, 11, 12	semester	.5
Music Teacher's Assistant (Voc/Inst)	11, 12	semester	.5
Music Theory & Composition I & II	9, 10, 11, 12	semester	.5
Music Theater Workshop	9, 10, 11, 12	semester	.5
Percussion Ensemble	9, 10, 11, 12	semester	.5
Piano I, II, III, IV	9, 10, 11, 12	semester	.5
Survey of Music	9, 10, 11, 12	semester	.5
Vocal Arts I	9, 10, 11, 12	semester	.5
Vocal Arts II	9, 10, 11, 12	semester	.5

Other vocal options: Show Choir, Chamber Singers, and Musical Productions (interested students should see the teacher to learn more about these opportunities).

Other instrumental options: Marching Band, Concert Band, Jazz Band, Musical Productions (interested students should see the teacher to learn more about these opportunities).

MUSIC ELECTIVES

Music Teacher's Assistant **semester** **.5 credits**
Vocal (797) Instrumental (801)

This class is through direct arrangement with the teacher. Students planning to pursue a musical career have the opportunity to assist the teacher and begin applying musical skills acquired through previous music courses. **(Grades 11-12)**

Music Theory & Composition I (792); II (794) **semester** **.5 credits**

This course examines the organization of the basic components of musical sound. Students will be given the opportunity to compose vocal and instrumental music in a variety of styles. **(Grades 9-12)**

Musical Theater Workshop (793) **semester** **.5 credits**

This course presents a survey of American Musical Theater and its component styles in a classroom/performance situation. Students will study and perform scenes from Broadway musicals, prepare solos and duets, and analyze stylistic changes. **(Grades 9-12)**

Piano I (795); II (799); III (798); IV (773) **semester** **.5 credits**

Piano I is designed as an introduction to keyboard skills. The largest components of the course will deal with piano performance and music theory. The student will become proficient at playing simple folk tunes and composed understanding of the theoretical foundations of the music they perform through analysis. At the Piano II level, the student will become proficient at playing intermediate arrangements and develop harmonic understanding. This class is open to all grade levels. **(Grades 9 -12) *or permission from instructor**

Survey of Music (791)

This is a non-performance class for those students interested in the historical contributions of musicians from 1600 to the present. **(Grades 9-12)**

Vocal Arts I (796) & II (800) **semester** **.5 credits**

Vocal Arts is a class/ensemble for students who seek continuing growth and improvement in their voices, musical skills, and artistry. Solo and ensemble experiences will be provided focusing on: vocal production, musicality, performance techniques, range extension, diaphragmatic breathing, audition preparation, and music reading. A wide variety of styles will be utilized (including Broadway show tunes, arts songs, vocal jazz, and folk music). **(Grades 9-12)**

Instrumental Master Class (9890) **semester** **.5 credits**

Instrumental Master Class is a class/ensemble for students who seek continuing growth and improvement playing their wind or percussion instrument. Solo and ensemble experiences will be provided focusing on: tone production, musicality, range extension, diaphragmatic breathing, audition preparation, improvisation, and music reading. A wide variety of styles will be utilized, including classical and jazz. **(Grades 9-12)**

MUSIC ELECTIVES (CONT.)

Guitar I Guitar II Guitar III Guitar IV **semester .5 credits**

Guitar I is designed as an introduction to guitar playing. The largest components of the course will deal with guitar performance and music theory. The students will become proficient at playing simple folk and popular tunes and develop a theoretical understanding of the foundations of music. At the Guitar II level, the student will become proficient at playing intermediate arrangements and developing harmonic understanding. **(Grades 9-12) * or permission from instructor**

Percussion Ensemble **semester .5 credits**

Percussion Ensemble is a class/ensemble for students who seek continuing growth and improvement on percussion instruments. Solo and ensemble experiences will be provided. A wide variety of styles will be utilized including classical, jazz, and popular. **(Grades 7-12) *with two years of percussion experience in concert band**

BAND & CHORUS

Band (7th Grade) (974 & 977) **year N/A**

With lesson attendance and performance in the bank, students will develop basic instrumental music skills. Students from this group may be chosen to attend the Junior High IU 9 Band Festival, and may participate in Small Ensembles or Marching Band (with Band Director's approval). **(Grade 7)**

Band (8th Grade) (975 & 995) **year N/A**
Band (9th Grade) (976 & 996) **year .5 credit***

Members of the band will continue to develop basic skills necessary in successful instrumental performance by regular lesson attendance and the performance of a variety of Concert Band music. Students may be chosen to attend the Junior High IU 9 Band, and may participate in the Jazz Band, Graduation Band, and Small Ensembles. All are strongly encouraged to participate in Marching Band. **(Grades 8-9) *Note: senior high credit for grade 9 band only.**

Band (Senior High) (987 & 997) **year .5 credits**
***students taking Band & Chorus use these numbers: (963 & 961)**
**** Career & Technical Center students (989 & 990)**

Students will develop knowledge, understanding, and skills of instrumental sound production, through the practice and performance of a variety of concert band music literature. Students from this group may be chosen to attend District Band and/or Senior High IU 9 Band. Each student also has the opportunity to play in Jazz Band, Graduation Band, Small Ensembles, and is strongly encouraged to participate in the Marching Band. **(Grades 10-12)**

BAND & CHORUS (Cont.)

Chorus (7th Grade) (971 & 991) **year** **N/A**

This chorus consists of students who wish to begin choral training. Basic vocal techniques are taught and students also perform with the junior high chorus. **(Grade 7)**

Chorus (8th Grade) (972 & 992)* **year** **N/A**
Chorus (9th Grade) (973 & 993)** **year** **.5 credits***
***8th grade students taking Band & Chorus use these numbers: (956 & 957)**
***9th grade students taking Band & Chorus use these numbers: (965 & 966)**

This chorus gives emphasis to choral techniques and to presenting the choral music in an artistic manner. **(Grades 8-9) *Note: senior high credit for grade 9 chorus only.**

Chorus (Senior High) (984 & 994) **year** **.5 credits**
***students taking Band & Chorus use these numbers: (983 & 955)**
****Career & Technical Center students (979 & 980)**

Students will have the opportunity to develop some knowledge, understanding, and skills related to basic vocal techniques. Many students are chosen for district and state events after careful selection as to ability and interest in extra choral training. **(Grades 10-12)**

Other vocal options: Show Choir, Chamber Singers, and Musical Productions (interested students should see the teacher to learn more about these opportunities).

Other instrumental options: Marching Band, Concert Band, Jazz Band, and Musical Productions (interested students should see the teacher to learn more about these opportunities).

BUSINESS, MANAGEMENT, & MATH

Interests and Abilities typical of this path

Are you . . .

. . . disciplined and hardworking?
. . . enthusiastic and self-confident?
. . . ambitious and achievement-oriented?
. . . organized, accurate, and efficient?
. . . a "people person"?
. . . persuasive?
. . . competitive?
. . . reliable and punctual?

Do you have . . .

. . . leadership skills?
. . . the ability to work under pressure?
. . . the ability to think logically?
. . . decision-making skills?

Do you like to express your feelings/ideas . . .

. . . visually?
. . . in writing?
. . . mathematically?
. . . verbally?

Do you enjoy . . .

. . . answering questions or helping customers?
. . . planning and directing other people's activities?
. . . solving problems?
. . . working with numbers or writing letters?
. . . filing records, or preparing reports?
. . . giving and receiving information?

Entry Level Careers

These careers require on-the-job training and/or minimal training:

Messenger Service Worker
Shipping/Receiving Clerk
Hospital Admitting Clerk
Credit Collector
Telemarketing Specialist
Purchasing Agent
Personnel Clerk
Court Clerk
Accounting Clerk
Loan Interviewer
Warehouse Worker
Receptionist
Transcriber
Stenographer
Mail Clerk
File Clerk
Stock Clerk
Data Entry Clerk

Semi-Professional Careers

These careers generally require Technical/Community College and/or experience:

Administrative Assistant
Manufacturers' Sales Worker
Insurance Agent/Broker
Small Business Owner
Sales Representative
Computer Programmer
Real Estate Sales/Broker
Title Examiner
Office Manager
Claim Adjuster
Tax Preparer
Cable Installer
Personnel Manager
Network Troubleshooter
Buyer
Paralegal
Secretary
Auctioneer
Travel Agent
Bookkeeper
Software Installer

Skilled & Professional Careers

For most of these careers you must successfully complete college/university entrance requirements. These careers generally require specialized schools or colleges/universities and experience:

Business Education Instructor
Advertising Account Executive
Financial Analyst
Computer Database Manager
Marketing Research Worker
Information Marketing Specialist
Marketing Director
Math Teacher
Electronic Engineer
General Manager
Financial Planner
Securities Broker
Computer Consultant
Real Estate Appraiser
Networking Specialist
Purchasing Agent
Network Designer
Management Information
Office Planner
Actuary
Estate Planner
Statistician
Sales Manager
Bank Officer
Accountant
Media Buyer
Systems Professional

BUSINESS

COURSE	GRADE	LENGTH	CREDIT
Business Law**	**11, 12**	**semester**	**.5**
Computer Applications DE	**9, 10, 11, 12**	**semester**	**.5**
Money $mart	**11, 12**	**semester**	**.5**
Word Processing I	**8, 9, 10, 11, 12**	**semester**	**.5**
Word Processing II	**8, 9, 10, 11, 12**	**semester**	**.5**
Word Processing III	**9, 10, 11, 12**	**semester**	**.5**
Word Processing IV	**9, 10, 11, 12**	**semester**	**.5**
Yearbook***	**8, 9, 10, 11, 12**	**semester**	**.5 (1.0)**

****Offered alternating years.**
*****Can be taken in the fall and the spring for a total of 1.0 credit.**

DE*: DUAL ENROLLMENT; ADDITIONAL REQUIREMENTS APPLY INCLUDING STUDENT'S GRADE LEVEL REQUIRED IN ORDER TO RECEIVE COLLEGE CREDIT. CHECK WITH PRINCIPAL. **Eligible students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet is available in the Principal's Office.**

Yearbook (98) **semester/year** **.5 (1.0) credits**

Students must be selected as a member of the yearbook staff to take this hands-on course. Students will learn many aspects of developing a published yearbook. Students will learn and apply skills for photography, journaling, page design, proofreading and some will be required to assert leadership skills. Students who are interested must first see the yearbook Advisor in April of the preceding year to apply for acceptance before they will be enrolled in the course. **(Grades 8-12)**

BUSINESS COURSES & ELECTIVES

Business Law (562) **semester** **.5 credits**

The purpose of Business Law is to equip the student with a basic understanding of law as it affects them in their personal and professional experiences. Topics include minor law, family law, the judicial system, employer-employee relationships, insurance, contract law, use/misuse of credit, and consumer protection. **This course is offered in alternating years. (Grades 11-12)**

Computer Applications (590) DE **semester** **.5 credits**

Students are introduced to the Microsoft Office applications of Word, Excel, and PowerPoint. Students learn the multiple desktop publishing features in Microsoft Word. Also, students learn basic fundamentals in making spreadsheets and charts in Excel. A great deal of time is dedicated to the basic fundamentals of making spreadsheets and charts in Excel. Also, students learn to apply skills to electronic presentations in PowerPoint. **College bound students** will find these skills essential to their success. Overall, typing, accessing data and formatting skills are required and perfected. **Prerequisite: Personal Keyboarding. Certain grade-level eligible students can obtain college credit through the dual enrollment program.**

Money $mart (693) **semester** **.5 credit**

You probably live with your family and at this point don't have to worry about financing the basic costs of living such as housing, utilities, and food. Your money is available for personal use and the future with all its responsibilities seems far removed.

Look again! That time is just around the corner. Your earning will be on the low side, you'll have little money management experience and no plan. We invite you to participate in Money $mart and learn about paychecks, checking accounts and budgets, credit, the stock market and more. A financial literacy program will help you to understand and manage your financial resources – an essential life skill. **(Grades 11-12)**

BUSINESS COURSES & ELECTIVES (Cont.)

Word Processing I (546) semester .5 credits

In Word Processing I, the student continues mastery of the keyboard, proper typing, proper posture and techniques learned in Personal Keyboarding. Students master the following formatting skills: placement and form of a variety of business letters and envelopes, various report styles, memorandums, and tables. Utilizes Microsoft Word software on networked computers. **(Grades 8-12)**

Word Processing II (547) semester .5 credits

In Word Processing II, the student applies the knowledge gained in Word Processing I to compose and format advanced business and legal forms, letters, and tables. In this course, students begin to complete simulations to encourage using their skills for a variety of projects. Utilizes Microsoft Word software on networked computers. **Prerequisite: Word Processing I. (Grades 8-12)**

Word Processing III (548) semester .5 credits

In Word Processing III, the student applies the knowledge gained in Word Processing II to compose and format word processing documents in advanced simulated situations, mail-merged documents, database management, and report formatting. The simulations replicate real-life uses of word processing in a variety of work environments. Utilizes Microsoft Word software on networked computers. **Prerequisites: Word Processing II. (Grades 9-12)**

Word Processing IV (549) semester .5 credits

In Word Processing IV, the student applies the knowledge gained in Word Processing III to a comprehensive presentation of Word 2007. In this course students will create a cover letter and resume. The course includes formatting of documents with a title page, tables, charts, and watermarks. Form letters, mailing labels, and professional newsletters formatting are also taught in this course. This course provides skills for entry-level jobs where employers expect fine-tuned word processing skills. Utilizes Microsoft Word software on networked computers. **Prerequisite: Word Processing III. (Grades 9-12)**

COMPUTER SCIENCES

AP® Computer Science Principles (AP202) year 1 credit

The AP® Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Along with the fundamentals of computing, you will learn to analyze data, information, or knowledge represented for computational use; create technology that has a practical impact; and gain a broader understanding of how computer science impacts people and society. You will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. Students taking this course may receive college credit through passing the through-course assessment and the AP® exam at the end of the year.

(Grades 11-12) Must successfully complete Algebra II.

Network Systems Technology* (749) (morning) year 3 credits/year
3-year program

***This course is an approved PDE program of study and is offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

This is an industry-based instructional program that consists of six distinct and separate semesters. Students will gain proficiency in computer hardware, technology troubleshooting repair and maintenance, operating systems and software, network technologies, network media and topologies, network devices, network management, security fundamentals as well as industry-related writing, mathematics, and professional skills. The curriculum lays the groundwork for several possible industry certifications including:

- PC Pro
- Network Pro
- A+
- Network+
- Cisco CCent

Students should be enthusiastic about computers and technology, be able to communicate well with others, and have excellent problem-solving skills.

****DE: Dual enrollment course. Students can obtain college credit through Pennsylvania College of Technology. Enrollment information available at Seneca Highlands Career & Technical Center.**

MATH

COURSE	GRADE	LENGTH	CREDIT
Advanced Math DE** [N]	12	year	1.0
Advanced STEM	10, 11, 12	semester	.5
Algebra I	8	year	N/A
Algebra II [N]	10	year	1.0
Algebra II Honors DE** [N]	10	year	1.0
Algebra 9 CP [N]	9	year	1.0
Algebra Concepts 9	9	year	1.0
Algebra Concepts 10	10, 11	year	1.0
AP® Calculus AB* [N]	12	year	1.0
AP® Computer Science Principles	11, 12	year	1.0
Calculus [N]	12	year	1.0
Discrete Math [N]	12	year	1.0
Geometry [N]	9, 10, 11, 12	year	1.0
Honors Calculus* DE** [N]	12	year	1.0
Honors Precalculus* DE** [N]	11, 12	year	1.0
Intro to Programming	9, 10, 11, 12	semester	.5
Keystone Remedial Algebra		semester	.5
Pre-Calculus [N]	11, 12	year	1.0
Tech Math II	10, 11, 12	year	1.0
Tech Math III	10, 11, 12	year	1.0

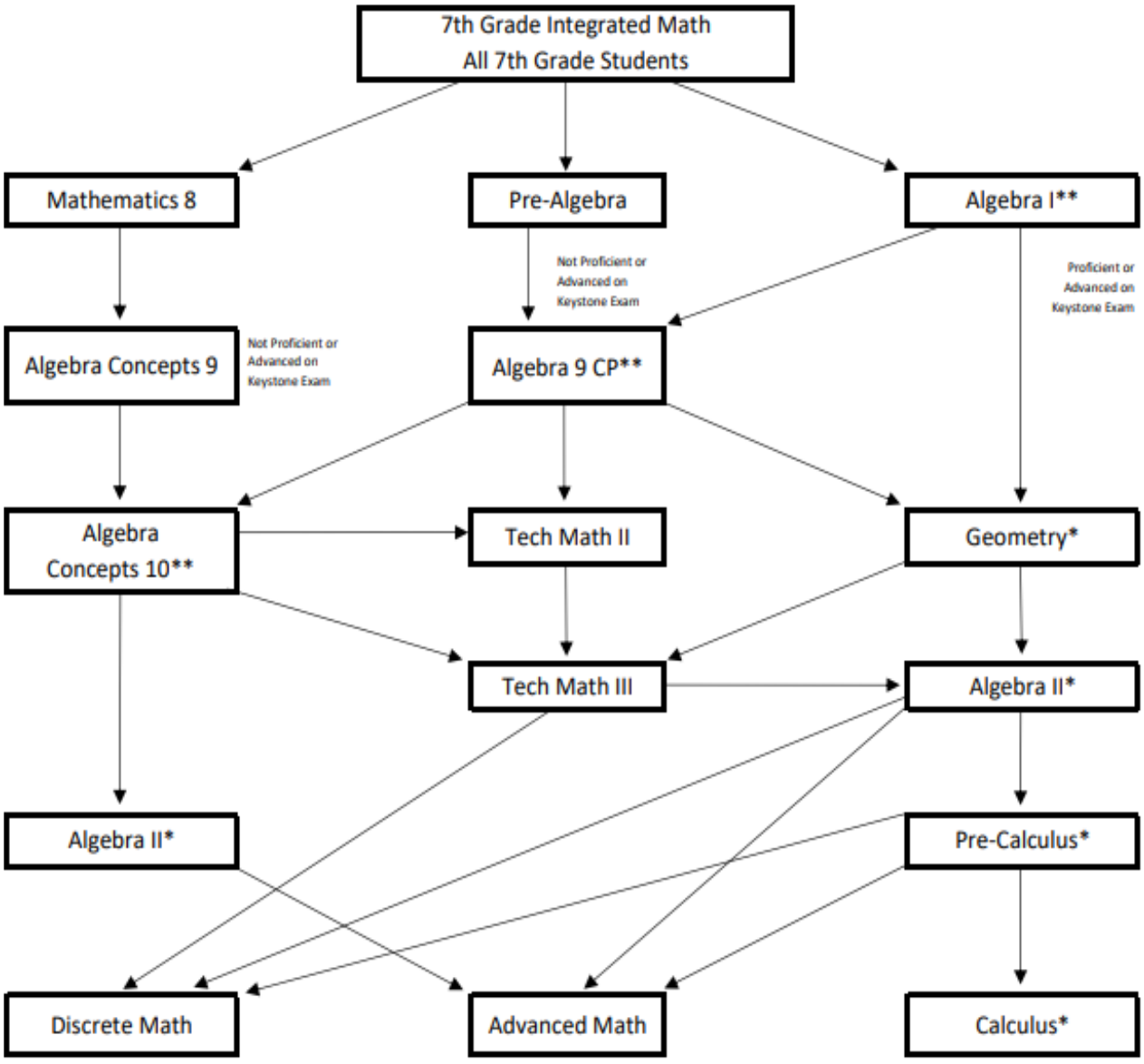
***Weighted course**

****DE: Dual enrollment course. Students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet available in the Principal's Office. Dual enrollment credits may also be obtained through the University of Pittsburgh at Bradford. Details available in the School Counseling Office.**

[N] NCAA Core Courses

MATH CURRICULUM FLOW CHART
(EFFECTIVE STARTING class of 2017)

The flow chart below is designed to guide students and staff in choosing the most beneficial sequence of courses. Any deviation from the prescribed sequence my result in a less than adequate mathematics education. Arrows represent permissible course selections based on the assumption that the course the arrow emanates from has been completed successfully.



*Students who have successfully completed Geometry and meet the criteria are eligible for Honors Algebra II, Honors Pre-Calculus, and Honors/AP Calculus.

**At the end of the Algebra course, students will take the Keystone Algebra I exam.

MATH COURSES

Keystone Remedial Algebra (201) semester .5 credit

This course is designed to help students who did not reach proficiency on the Keystone Exam, but the data supports the student moving on to Geometry. **The student must pass the Algebra Course. At the end of the semester, students will retake the Algebra Keystone Exam**. Students will be identified and placed in this course based on the scores of the Keystone Algebra Exam.

Algebra Concepts 9* (238) year 1 credit

This course is a follow-up to Mathematics 8 and is designed to prepare students for success on **the Keystone Algebra exam which is a graduation requirement**. The course will focus on a deeper understanding of algebraic concepts including number sense, linear equations/inequalities, and functions. **(Prerequisite: Mathematics 8)**

Algebra Concepts 10* (239) year 1 credit

This course is a continuation of Algebra Concepts 9 designed to prepare students for success on the **Keystone Algebra exam which is a graduation requirement**. The course will focus on a deeper understanding of algebraic concepts including number sense, linear equations/inequalities, and functions. **(Prerequisite: Algebra Concepts 9)**

Tech Math II year 1 credit

Tech Math II is a course designed to prepare a student for challenging technical fields in the future. The course will integrate math topics such as geometry, statistics, logic, trigonometry, and consumer math topics while utilizing prior algebra skills. **(Prerequisites: Algebra Concepts 10 or Algebra 9 CP)**

Tech Math III year 1 credit

Tech Math III is a course designed to prepare a student for challenging technical fields in the future. The course will integrate math topics such as algebra (advanced) topics, geometry, statistics, logic, trigonometry, and consumer math topics while utilizing prior algebra and geometry skills. **(Prerequisites: Tech Math II or Geometry)**

COLLEGE PREPARATORY MATH COURSES

Algebra 9 CP (230) **year** **1 credit**

This course is a follow-up to Algebra I (8-1) sections designed to prepare students for success on the **Keystone Algebra exam which is a graduation requirement**. The course will focus on a deeper understanding of algebraic concepts including number sense, linear equations/inequalities, and functions. **(Prerequisite: Algebra I [8-1] and not Proficient/Advanced on Keystone Algebra exam.)**

Geometry (231) **year** **1 credit**

This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations and right triangle trigonometry. Inductive and deductive thinking skills are used in problem solving situations and applications. It also emphasizes writing proofs for properties of geometric figures.
(Prerequisite: Algebra I and Proficient/Advanced on Keystone Algebra exam)

Algebra II (241) **year** **1 credit**

This course is a follow-up to Geometry designed to prepare students for success in advanced algebra. The course will focus on a deeper understanding of algebraic concepts and techniques and techniques including linear equations/inequalities, functions, systems of equations/inequalities, polynomials, matrices, inverse relationships, and complex numbers. **(Prerequisite: Geometry)**

Precalculus* (251) **year** **1 credit**

This course will cover those mathematical topics needed for success in higher mathematics courses such as Calculus. Students will discuss the basic concept of functions along with the ideas that pertain to them. Students will work with various functions including trigonometric, polynomial, and inverse. They will work with advanced algebraic techniques and complete a thorough study of trigonometry. **(Prerequisite: Algebra II)**
***Please refer to the Math Flow Chart on page 42.**

Calculus* (270) **year** **1 credit**

This course is for students who anticipate entering college in a program that requires Calculus. In this course, students will explore the four major topics of calculus: limits, continuity, differentiation, and integration. This course will prepare students for the first semester of college calculus but is not intended to replace such courses. **(Prerequisite: Precalculus) (Grade 12)**

Advanced Math (268) **year** **1 credit**

Advanced Math is a course designed for students who would like an extra year of advanced algebra instead of calculus. Candidates for this course are students who struggled in Pre-Calculus and would like more time with algebra concepts before moving on to Calculus. Topics for the course will include review of advanced algebraic techniques and functions as well as work in the areas of matrices, exponential and logarithmic functions, conic sections, polar coordinates, probability and statistics, sequences and series, and beginning calculus. **(Prerequisite: Algebra II) Students can also obtain college credit through the dual enrollment program.**

COLLEGE PREPARATORY MATH COURSES (Cont.)

AP® Calculus AB (269) year 1 credit

AP® Calculus AB is a course designed to prepare students for the AP® Calculus AB exam given by the College Board in May each year. The course will cover all topics of a college level Calculus I course as outlined in the AP® Calculus AB curriculum. The course is designed to be taught at a fast pace to ensure that students are ready for the AP exam at the beginning of May. Before studying AP® Calculus AB, all students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. **(Prerequisite: Precalculus or Honors Precalculus). Weighted course.**

Discrete Math (261) year 1 credit

While Calculus is traditionally thought of as the mathematics for engineers and science, Discrete can be thought of as the mathematics of computers (but is also used in the sciences). In this course, students will investigate topics associated with logic and reasoning, set theory and counting, graph theory, and number theory. Students will learn to think and problem solve in unique ways. **(Grades 11-12) Prerequisite: Geometry and Algebra II)**

HONORS MATH COURSES

Algebra II Honors* (242) year 1 credit

This course is a follow-up to Geometry designed to prepare students for success in advanced algebra. The course will include additional topics, such as exponential and logarithmic functions and conic sections. This course differs from Algebra II in that topics will be approached in a much more rigorous fashion; students will be completing additional projects/papers and will be expected to perform at a much more advanced level and faster pace.
(Prerequisite: Geometry) Weighted course. Students must meet eligibility requirements to enroll in this course. (Grades 10-11) *Please refer to the Math Flow Chart on page 38. Students can also obtain college credit through the dual enrollment program.

Calculus Honors* (262) year 1 credit

The course will follow the Advanced Placement® Calculus AB curriculum. **Weighted course. (Prerequisite: Geometry) Students must meet eligibility requirements to enroll in this course. Students can also obtain college credit through the dual enrollment program. (Grade 12) *Please refer to the Math Flow Chart on page 39.**

HONORS MATH COURSES (Cont.)

Pre-Calculus Honors* (252) **year** **1 credit**

This course will cover mathematical topics needed for success in higher mathematics. Students will discuss the basic concepts of functions along with the ideas that pertain to them. Students will work with various functions including trigonometric, polynomial, and logarithmic. Students will also discuss advanced algebraic techniques. This class differs from Pre-Calculus in that topics are approached much more rigorously with additional projects/papers. Students are expected to perform at a more advanced level. Additionally, concepts and principles of analytic geometry and basic calculus are explored. Analytic geometry is a driving force in modern geometry and is widely associated with the fields of engineering and physics, and focuses on the application of the Cartesian coordinate system with respect to geometry. **(Prerequisite: Algebra II) Weighted course. Students must meet eligibility requirements to enroll in this course. Students can also obtain college credit through the dual enrollment program. (Grades 11-12)**
***Please refer to the Math Flow Chart on page 42.**

MATH ELECTIVES

Advanced STEM (64) **semester** **.5 credit**

This course is designed for the student who really enjoyed the SMART lab in STEM I & II and wants to go into greater depth with engagements of their choice. Students will collaborate with the teacher to develop projects based on individual interest. Projects will require the student to do research and explain the underlying concepts of science and mathematics. Students will also be expected to give presentations of their research and projects using a digital portfolio. **Prerequisite: successful completion of STEM I & II, usually in grades 8 & 9. (Grades 10-12)**

AP® Computer Science Principles (AP202) **year** **1 credit**

The AP® Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Along with the fundamentals of computing, you will learn to analyze data, information, or knowledge represented for computational use; create technology that has a practical impact; and gain a broader understanding of how computer science impacts people and society. You will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. Students taking this course may receive college credit through passing the through-course assessment and the AP® exam at the end of the year.
(Grades 11-12) Must successfully complete Algebra II.

MATH ELECTIVES

Intro to Programming (243) semester .5 credit

Intro to programming is a semester course which is designed to give students a basic understanding of computer programming. Students will study the basic structures and operations common to all programming languages. They will program their own apps and games as well as learn a bit about the history of computers and how they work. Several languages may be used throughout the course such as Logo, Alice, Scratch, Snap!
(Prerequisite: Successful completion of Algebra) (Grades 9-12)

Intro to Programming II semester .5 credit

Intro to Programming II is a semester course which is designed to be a continuation of Intro to Programming. Students will study more complex structures and operations common to all programming languages. Emphasis will be on functional programming and data structures. Students will have a chance to program apps for phones and tablets. **(Grades 9-12) (Prerequisite: Intro to Programming)**

Health & Human Services

- **Interests and Abilities typical of this path**

Are you . . .

. . . thoughtful, sensitive, & patient?
. . . flexible?
. . . alert & composed in a crisis & conflict?
. . . able to get along with a wide variety of people?
. . . able to take and follow directions?

Do you have . . .

. . . a concern for people & their problems?
. . . leadership skills?
. . . the ability to be accurate?
. . . good physical skills?
. . . a desire to help people?
. . . the ability to analyze and evaluate information?

Do you like to work . . .

. . . with the young, elderly, sick, or handicapped?
. . . as part of a team?
. . . with constantly changing situations & duties?
. . . planning & directing others' activities?

Do you like to express your feelings/ideas . . .

. . . creatively?
. . . critically?
. . . clearly in writing as well as verbally?

Do you enjoy . . .

. . . doing volunteer work in the community?
. . . promoting wellness lifestyles?
. . . varied tasks?
. . . sharing ideas with others?
. . . learning about the interactions of individuals or groups of people?
. . . being in charge of planned activities?

Entry Level Careers

These careers require on-the-job training and/or minimal training:

Aerobics Instructor
Youth Toy Consultant
Recreation Aide
Animal Worker
Dialysis Technician
Home Health Aide
Short Order Cook
Seamstress
Dietetic Assistant
Hotel Desk Clerk
Cake Decorator
Child Care Aide
EEG/EKG Technologist
Waiter or Waitress
Laundry Worker
Tailor
Dental Assistant
Teacher's Aide
Geriatric Aide
Orderly
Tour Escort
Garment Fitter
Upholsterer

Semi-Professional Careers

These careers generally require Technical/Community College and/or experience:

Swimming Instructor
Massage Therapist
Radiologic Technologist
Licensed Practical Nurse
Substance Abuse Counselor
Physical Therapy Assistant
Veterinary Assistant
Pastry Chef & Baker
Restaurant Manager
Convention Specialist
Theatrical Makeup & Hairstyling
Interior Designer
Social Director
Preschool Teacher
Respiratory Therapist
Inhalation Therapist
Medical Assistant
Wedding Consultant
Health/Fitness Worker
Dietetic Technician
Occupational Therapy Assistant
Caterer
Nanny
Floral Designer
Cosmetologist
Paramedic
Flight Attendant
Cook & Chef
Daycare Director
Dental Hygienist

Skilled & Professional Careers

For most of these careers you must successfully complete college/university entrance requirements. These careers generally require specialized schools or colleges/universities and experience:

AIDS Counselor
Physical Ed Teacher
Geriatric Social Worker
Registered Dietician
Interior Designer
X-Ray Technician
Physical Therapist
Financial Planner
Home Energy Consultant
Occupational Therapist
Family & Consumer Science Teacher
Chiropractor
Health Instructor
Public Health Engineer
Probation Counselor
Museum Curator
Divorce Mediator
Food Magazine Editor
Consumer Advocate
Food Technologist
Fashion Photographer
Physician's Assistant
Athletic Trainer
Nurse
Coach
Travel Agent
Executive Chef
Chemist, food
Nutritionist
Hotel Manager
Fashion Buyer
Fashion Journalist
Fashion Designer

CULINARY ARTS

Culinary Arts* (771: morning) **year** **3 credits/year**
3-year program

***This course is offered at Seneca Highlands Career & Technical Center and meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

Course completers are recognized with a Certificate status – Cook.
Institutional Food Workers (CIP Code 12.0508) related area of study.

This program prepares students for immediate employment into commercial, institutional and other food careers at entry level employment, or for entrance into a post-secondary training institution. Planned instructional and hands-on learning experiences include theory and applications related to planning, selecting, purchasing, preparing (cooking and baking), and serving of quality and quantity food and food products; nutrition, use and care of commercial equipment and food safety. Practical experiences are a major portion of the course of study through the operation and management of a complete restaurant (Eagle's Nest) and kitchen facility. Students operate and maintain all facets of our full-service facility.

Initial class fee: Uniforms - approximately $100.
Third-year students, or those wishing to obtain a Safe Food Handlers Permit certification: ServSafe Essential textbook - $90.

****Dual enrollment course. Students can obtain college credit through Pennsylvania College of Technology. Enrollment information available at Seneca Highlands Career & Technical Center.**

Early Childhood Education

Early Childhood Education **year** **3 credits/year**
3-year program

***This course is offered at Seneca Highlands Career & Technical Center and meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

The Early Childhood Education program is designed to teach students the aspects of teaching and working with young children. Students will:

- v Explore career pathways and develop the characteristics of successful teachers/childcare providers.
- v Apply theoretical concepts to real-life situations.
- v Learn how to meet the developmental needs and interests of young children.

Course completers will be able to meet the criteria to apply for the CPA (Child Development Associate). They will be First Aid/CPR certified and have the necessary clearances for employability.

Certification – Child Development Associate
CIP code: 19.0708 related areas of study

HEALTH
&
Physical Education

COURSE	GRADE	LENGTH	CREDIT
Health	11	semester	.5
Health Assistant*	10, 11, 12	3 years	3/year
Physical Education	9, 10	semester	.5
Physical Education	11, 12	semester	.5

***This course is offered at Seneca Highlands Career & Technical Center.**

HEALTH & PHYSICAL EDUCATION

Health (951) **semester** **.5 credits**

Health education is a state required course that all students must pass in order to graduate. Health education includes instruction in the concepts and skills which affect personal, family and community health, nutrition, the prevention of alcohol, chemical, and tobacco use, and violence prevention. Some topics include (but are not limited to): wellness, stress, social responsibility, safety, first aid, relationships, chronic and communicable diseases, fitness, nutrition, chemical use and its consequences, and evaluation of valid health information.
(Grade 11)

Physical Education 9-10 (831; 832 **semester** **.5 credits**

Physical Education 11-12 (838; 839) **semester** **.5 credits**

Physical education is required for all students and offered on a semester basis. Students will be assigned to a physical education class that will meet five periods a week for either the first or second semester of each year. The program is varied to accommodate the various seasons.

Activities offered are:

- ❏ Archery
- ❏ Badminton
- ❏ Basketball
- ❏ Flag Football
- ❏ Frisbee Golf
- ❏ Golf
- ❏ Lacrosse
- ❏ Mat ball
- ❏ Presidential Physical Fitness
- ❏ Soccer
- ❏ Softball
- ❏ Speedball
- ❏ Tennis
- ❏ Track & Field
- ❏ Tumbling
- ❏ Volleyball
- ❏ Weight Training
- ❏ Wiffle Ball
- ❏ 4-Square
- ❏ 4-Walls

Health Assistant

Health Assistant* (760: morning) **year** **3 credits/year**
3-year program

***This course is a PDE approved program of study and is offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

Health Assistant students learn the competencies required to secure a position in the healthcare field or other health occupations. The student will perform the following services: bedside care of patients, basic nursing skills, collecting lab specimens, documenting in a medical record, emergency care, and elder care setting. The student will receive both theory and practical hands-on experience that includes the knowledge needed to acquire a position, and the job survival skills to remain employed. Students who complete the program are eligible to take the Pennsylvania Nurse Aide Certification exam. Additionally, students who complete the Health Occupations portion of the program will receive a CPR and First Aid certificate.

Prerequisites:

- **Students enrolling in this program must request a criminal record check through the Pennsylvania State Police. This will be done at the Career & Technical Center at a cost of $10.**
- **Enrollees must obtain a medical physical stating that they are free from communicable diseases and can fully physically participate in the program <u>prior</u> to entering the program.**
- **Students also must be administered a two-step Mantoux test (TB test) and a drug test which are provided by the Career & Technical Center.**
- **Additionally, if the student has NOT been a resident of Pennsylvania for the <u>last</u> <u>two years</u> an FBI clearance is required <u>BEFORE</u> entering the program.**
- **Enrollees must participate in a mandatory urine drug test provided by the CTC prior to acceptance to the program.**
- **<u>Uniform tops and pants (color to be determined by the class), white shoes, and a watch with a sweep second hand are mandatory for clinical.</u>**

****Dual enrollment course. Students can obtain college credit through Pennsylvania College of Technology. Enrollment information available at Seneca Highlands Career & Technical Center.**

SCIENCE & TECHNOLOGY

Interests and Abilities typical of this path

Are you . . .

. . . comfortable working with machines & equipment?
. . . willing to learn to work with your hands?
. . . able to complete projects?
. . . willing to learn to be accurate?

Do you have . . .

. . . leadership ability & good judgment?
. . . the ability to be accurate and concentrate?
. . . good eye-hand coordination?
. . . the ability to analyze problems?
. . . mechanical aptitude?
. . . the curiosity & ability to solve a problem with creativity?

Do you like to work . . .

. . . both alone and with other people?
. . . with your hands?
. . . with computers, robots, or computer-controlled machines?
. . . with metal, plastics, or wood materials?
. . . with others to solve a real life problem?

Do you like to express your feelings/ideas . . .

. . . by working with your hands, assembling, building or repairing things?
. . . by drawing detailed plans or patterns or working with blueprints?
. . . with numbers and/or creatively?

Do you enjoy . . .

. . . figuring out how things work?
. . . operating or fixing machines?
. . . collecting rocks, minerals, or soil samples?
. . . helping others build things?

Entry Level Careers

These careers require on-the-job training and/or minimal training:

Bicycle Mechanic
Gas Station Attendant
Machine Tool Operator
Greens Keeper
Cannery Worker
Pet Store Worker
Veterinary Attendant
Lab Assistant
Industrial Laser Machine Operator
Railroad Maintenance
Long Haul Truck Driver
Landscape Gardener
Commercial Fisher
Flower Grower
Lab Assistant
Fish Hatchery Worker
Animal Trainer
Local Truck Driver
Veterinary Assistant
Bricklayer
Logger
Die Cutter
Roofer
Electroplater
Cement Loader
Forester Aide

Semi-Professional Careers

These careers generally require Technical/Community College and/or experience:

Aerospace Technician
Nuclear Technician
Gunsmith
Diesel Mechanic
Welder
Farrier
Animal Breeder
Taxidermist
Cabinet Installer
Electrician
Genetic Engineer Research Assistant
Auto Body Repairer
Lathe Operator
Drafter/Design Technician
Automotive Mechanic
Civil Engineering Technician
Robotics Technician
Equine Management
Forestry Technician
Laser/Fiber Optics Technician
Estimator
Railroad Conductor
CAD Specialist
Chemical Technician
Avionics Technician
Carpenter
Biotechnician
Horse Trainer
Architectural Drafter
Mason
Plumber
Insulator

Skilled & Professional Careers

For most of these careers you must successfully complete college/university entrance requirements. These careers generally require specialized schools or colleges/universities and experience:

Aerospace Engineer
Industrial Designer
Industrial Hygienist
Flight Instructor
Robotics Engineer
Pathologist
Microbiologist
Archaeologist
Forensic Scientist
Systems Engineer
Vocational Teacher
Fish & Game Warden
Wildlife Ecologist
Genetics Engineer Research Scientist
Ceramic Engineer
Civil Engineer
Tech Ed Teacher
Building Inspector
Electrical Engineer
Meteorologist
Botanist
Astronomer
Environmental Analyst
Science Teacher
Veterinarian
Agronomist
Wildlife Manager
Architect
Chemist
Airplane Pilot
Plant Manager
Airline Dispatcher
Physicist
Entomologist
Biologist
Geophysicist
Seismologist
Park Naturalist
Park Ranger
Conservationist
Water Resource Director

SCIENCE

COURSE	GRADE	LENGTH	CREDIT
Advanced Chemistry*** [N]	12	year	1.0
Advanced STEM	11, 12	semester	.5
AP® Chemistry	11, 12	year	1.0
Astronomy [N]	11, 12	semester	.5
Basic Electronics	11, 12	semester	.5
Biology CP [N]	9	year	1.0
Chemistry*** [N]	10	year	1.0
Chemistry and Society	11, 12	semester	.5
Environmental Science***	10, 11, 12	semester	.5
STEM II	9, 10, 11, 12	semester	.5
Field Biology (Spring)***	10, 11, 12	semester	.5
Forensic Science***	12	semester	.5
General Science	9	year	1.0
General Biology	10	year	1.0
Honors Advanced Biology** [N]	12	year	1.0
Honors Chemistry** [N]	10	year	1.0
Honors Physics I DE** [N]	11	year	1.0
Investigative Techniques	10, 11, 12	semester	.5
Keystone Remedial Biology	10, 11, 12	semester	.5
Physics I*** [N]	11	year	1.0
Physics II*** [N]	12	year	1.0
Science Research* [N]	12	semester	.5
Vertebrate Anatomy DE [N]	11, 12	year	1.0
Wildlife Ecology (Fall)*** [N]	10, 11, 12	semester	.5

* Must be approved by a member of the Science Faculty

** Weighted course

*** Has prerequisites

DE: Dual enrollment course. Students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet is available in the Principal's office. Dual enrollment courses are also offered through the University of Pittsburgh at Bradford. Details are available in the School Counseling Office.

[N] NCAA Core Courses

SCIENCE COURSES

General Science **year** **1.0 credit**

The General Science course is an eclectic approach to science education based on the Pennsylvania State Science and Technology Standards and serves to prepare students for the Pennsylvania System of School Assessment's Science assessment. The course will cover science standards (topics) in chemistry, physics, and biology. This is not a college preparatory science course. **(Grade 9)**

Biology CP* **year** **1.0 credit**

A course designed to further the student's knowledge of the work of life. Topics include: differences in life forms, the cell, reproduction, growth, ecology, evolution, and environmental concerns. Laboratory investigations will include the use of microscopes and techniques in dissection for studying the structure of plants and animals. **Upon completion of this course students will take the Keystone Biology Exam. College Preparatory. (Grade 9)**

General Biology **year** **1.0 credit**

This course offers a practical approach to the basic principles of biology. The principles will be related to the everyday conditions students encounter in their lives and in the life around them. It will be based on the Pennsylvania System of School Assessment's Science standards; it prepares students for the Keystone exam. Labs experiences will be used to help the students apply what they have learned to their lives. **Upon completion of this course students will take the Keystone Biology Exam. (Grade 10-12)**

Chemistry* (341) **year** **1.0 credit**

This course is designed to introduce the student to the properties and behaviors of matter based on the atomic theory. Students will utilize basic algebra, graphing, laboratory skills, curiosity and insight, calculators and computers to assist in their investigations. **Prerequisite: Must have passed the Algebra Keystone exam and Biology Keystone exam, passed 9th grade Geometry and be concurrently enrolled in Algebra II or Pre-calculus. College Preparatory (Grade 10-12)**

Physics I* (351) **year** **1.0 credit**

A course designed to study the way in which matter and energy are related. Students will investigate forces, motion, gravity, machines, heat, light, and sound. **Prerequisite: Must have passed the Algebra Keystone exam and the Biology Keystone exam, and be concurrently enrolled in Algebra II or Pre-calculus. Must also have successfully completed Chemistry. College Preparatory (Grade 11-12)**

SCIENCE COURSES (Cont.)

Physics II **year** **1.0 credit**

We will begin a review of wave mechanics. This will lay the foundation for the study of modern physics. Students will study the evolution of modern theory of atomic structure. This will lead into quantum mechanics and a study of the special and general electronics and review of current astronomy. Concepts will be reinforced with lab activities and formal lab reports are expected.

The last quarter of the course will be spent reviewing Newtonian mechanics. Students will complete a final project. They will brainstorm and design an amusement park ride. After building a scale model of their ride and completing a paper they will do presentations to the class explaining the physics of the ride. We will then explore first-hand the physics of the amusement park. We will attend a field trip to Darien Lake where students are required to complete an assignment that will be part of their final exam. It will include measurements and calculations on the various aspects of different amusement park rides. **Prerequisites: Students must have successfully completed Physics I. Students can also obtain college credit through the dual enrollment program. (Grade 12)**

SCIENCE/TECHNOLOGY EDUCATION REQUIREMENT

STEM II (660) **semester** **.5 credit**

Students will use the knowledge and concepts taught in STEM I to explore in greater depth the various areas of technology. Students will work along or in pairs while progressing through a series of curriculum-guided systems, include:

1. Mechanics and structures
2. Computer Graphics
3. Science and Data Acquisition
4. Publishing and Multimedia
5. Alternative and Renewable Energy
6. Robotics and Control Technology
7. Circuitry
8. Computer Simulation

Learning will be computer-based and all modules have hands-on activities or projects. Students will rotate through the 12 stations once every 7-10 days. During each engagement they design projects, test their ideas, and create e-Portfolios to document their learning. (**Grades 9-12)**

HONORS SCIENCE COURSES

Honors Advanced Biology (363) **year** **1.0 credit**

Advanced topics in biology are selected to prepare students for first-year college biology courses. The course will include extensive advanced laboratory procedures and research. It will also connect the levels of biology and areas of science to help students comprehend the main concepts with a deeper understanding. **Students must meet eligibility criteria to enroll in this course. Weighted course. (Grade 12)**

Honors Chemistry (342) **year** **1.0 credit**

This course is designed for students who have shown an aptitude for the sciences and may be considering science-related careers. It covers the same topics as Chemistry I (Metric-English conversions, atomic structure, development of the Periodic Table, chemical bonding, writing chemical equations, stoichiometry, gas law calculations and concentration of solutions) but at an accelerated pace with more emphasis on the theory and experimentation that led to major discoveries.

The course will also include student-initiated discussions on current topics, demonstrations of chemical reactions, laboratory experiments (where they will learn lab safety, terminology and correct lab procedures), written lab reports as well as a 6-8 page report on a science-related topic. **College Preparatory. Weighted course. Students must meet eligibility criteria to enroll in this course. (Grade 10.)**

Honors Physics (350) **year** **1.0 credit**

Honors Physics will utilize advanced mathematics and laboratory problem solving to explore the depth of the nature of forces, motion, gravity, machines, heat, light, and sound. **College Preparatory. Weighted course. Students must meet eligibility criteria to enroll in this course. (Grade 11)**

ADVANCED SCIENCE COURSES

Advanced Chemistry **year** **1.0 credit**

Advanced Chemistry will review the basics from Chemistry I (conversions, development of the Periodic Table, atomic structure, bonding, gas laws and stoichiometry) then continue on into more advanced topics including heats of reaction, acid base titrations, chemical equilibrium, oxidation-reduction reactions and finally an overview of organic chemistry.

The course will also include a variety of laboratory experiments that supplement the classroom topics and will teach lab safety, proper lab procedures and techniques along with writing formal lab reports and a research paper. **This course is recommended for students intending to major in any science-related field. The class is only open to students who have successfully completed Chemistry I. (Grades 11-12)**

AP® Chemistry

This course is designed to be the equivalent of the general chemistry course taken during the first year of college. Students will gain an in-depth understanding of the fundamentals of chemical and mathematical problem solving. A large portion of the course will involve chemical and mathematical problem solving. A large portion of the course will involve laboratory activities that would be comparable to a college level laboratory experience.

The course will focus on the six Big Ideas of AP® Chemistry:

Big Idea 1: The chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangement of atoms. These atoms retain their identities in chemical reactions.

Big Idea 2: Chemical and physical properties of materials can be explained by the structure and arrangement of atoms, ions, or molecules and the forces between them.

Big Idea 3: Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons.

Big Idea 4: Rates of chemical reactions are determined by details of the molecular collisions.

Big Idea 5: The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.

Big Idea 6: Any bond or intermolecular attraction that can be formed can be broken. These two processes are in a dynamic competition, sensitive to initial conditions and external perturbations.

Upon completion of the course, students will have the opportunity to take the AP® Chemistry exam which is traditionally administered in May. **Prerequisite: Grades 11-12 who have successfully completed Chemistry I.**

ADVANCED SCIENCE COURSES (Cont.)

Honors Advanced Biology (363) **year** **1.0 credit**

Advanced topics in biology are selected to prepare students for first-year college biology courses. The course will include extensive advanced laboratory procedures and research. It will also connect the levels of biology and areas of science to help students comprehend the main concepts with a deeper understanding. **Students must meet eligibility criteria to enroll in this course. Weighted course. (Grade 12).**

Physics II **year** **1.0 credit**

We will begin a review of wave mechanics. This will lay the foundation for the study of modern physics. Students will study the evolution of modern theory of atomic structure. This will lead into quantum mechanics and a study of the special and general electronics and review of current astronomy. Concepts will be reinforced with lab activities and formal lab reports are expected.

The last quarter of the course will be spent reviewing Newtonian mechanics. Students will complete a final project. They will brainstorm and design an amusement park ride. After building a scale model of their ride and completing a paper they will do presentations to the class explaining the physics of the ride. We will then explore first-hand the physics of the amusement park. We will attend a field trip to Darien Lake where students are required to complete an assignment that will be part of their final exam. It will include measurements and calculations on the various aspects of different amusement park rides. **Prerequisites: Students must have successfully completed Physics I. Students can also obtain college credit through the dual enrollment program. (Grade 12)**

Vertebrate Anatomy **year** **1.0 credit**

A course designed to give the students an opportunity to explore the anatomical structure of representative vertebrate animals. Investigative laboratory exercises will explore the anatomy of the cat and other species. **Dissection is mandatory. Students can also obtain college credit through the dual enrollment program. Prerequisite: Students must have successfully completed General Biology or Biology CP. (Grade 12)**

SCIENCE ELECTIVES

Advanced STEM **semester** **.5 credits**

This course is designed for the student who really enjoyed the SMART lab in grades 8 and 9 and wants to go into greater depth with engagements of their choice. Students will collaborate with the teacher to develop projects based on individual interest. Projects will require the student to do research and explain the underlying concepts of science and mathematics. Students will also able expected to give presentations of their research and projects using a digital portfolio. (**Prerequisite: successful completion of STEM I & II, usually grades 8 & 9.) (Grades 10-12)**

Astronomy (353) **semester** **.5 credits**

Students will learn to use various methods to find constellations, individual stars and the planets. Students will study how and why ancient peoples used the celestial sky in their daily lives. A tour of the planets and their relationship to Earth using math skills and basic chemistry will be explored. Galaxies, meteors, asteroids, and our sun and moon will be addressed through various concepts meeting Science Standards of Pennsylvania. **Individual night observations will be a requirement. (Grades 11-12)**

Basic Electronics (390) **semester** **.5 credits**

Students will learn the basic principles of electronics including the components and how they work. The student will complete two projects including a telephone. **Prerequisite: A good knowledge of basic mathematics is required. (Grades 11-12)**

Chemistry and Society (369) **semester** **.5 credits**

Chemistry is the study of the substances in our world and how they interact with each other. This class will cover both the benefits and the problems chemistry has brought to society. Real life situations will be used to introduce the chemistry concepts and hands-on experimentation will be an important part of the course. **Students who are planning to take chemistry or have taken chemistry cannot take this course. (Prerequisite: General Biology) (Grades 11-12)**

Environmental Science (355) **semester** **.5 credits**

This course will be an introduction to environmental and ecological science. It will cover resulting environmental impacts and the risks associated with growth in a developing world. It will also cover water resource uses, renewable and non-renewable sources for power generation, natural resources, and our water cycle. **Prerequisite: Students must be currently taking Biology or have passed Biology. (Grades 10-12)**

SCIENCE ELECTIVES (CONT.)

Field Biology (319) semester .5 credits

Field biology will introduce the student to the methods used by biologists to solve problems in the field. The student will learn classroom theory as well as do field work for a wide range of techniques. **Prerequisite: Students must have successfully completed General Biology or Biology CP. Offered in the spring only. (Grades 10-12)**

Forensic Science (354) semester .5 credits

This course will review, reinforce, and expand upon science concepts covered in earlier science courses through the application of those concepts in laboratory work related to forensic science. Due to the popularity of forensic science in the media, students have developed an interest in the techniques, methods, and careers relating to crime scene investigation. This course will allow students to explore these interests through the application of scientific inquiry in the investigation of different types of evidence through observation, collection, and classification of data to the testing and analysis of the information collected. Students will also be required to present and interpret data with graphs as well as communicate and defend scientific argument. A multidisciplinary approach will be taken to incorporate a variety of scientific fields as well as mathematics, probability, sociology, and law. **Prerequisite: Students must have successfully completed Biology CP, Chemistry, and have successfully completed or be concurrently enrolled in Physics. (Grade 11)**

Investigative Techniques I (396) semester .5 credits

This is a hands-on, project-oriented approach to understanding the fundamental principles and concepts of physics and associated mathematics. Emphasis is placed on understanding mechanical, electrical, fluids, and thermal systems as they relate to work, force, rate, resistance, energy, and power. Problem solving-skills will be emphasized throughout this course. Topics covered will include solar ovens, solar/electric cars, hydrogen cars, bridges, pinhole cameras, rubber band airplanes, towers, CO2 cars, rockets, mousetrap cars and basic electricity. *Some topics may be taught in Investigative Techniques II*. **Students who have taken any college preparatory science courses or plan to take any college preparatory science courses cannot take this course. This course can only be taken once. (Grades 10-12)**

Investigative Techniques II (397) semester .5 credits

This course is a continuation of Investigative Techniques I. Students will continue their study of science in a hands-on, project oriented way. Any projects that weren't completed in Investigative Techniques I will be done in Investigative Techniques II. **Students who have taken any college preparatory science courses or plan to take any college preparatory science courses CANNOT take this course. This course can only be taken once. (Grades 10-12)**

SCIENCE ELECTIVES (CONT.)

Science Research (395) semester .5 credits

An advanced course in scientific research designed to provide students possessing a strong background in the natural sciences the opportunity to initiate, carry out, and conclude a research project. **Independent Study. Students must make arrangements with a member of the science faculty. (Grade 12)**

Wildlife Ecology (399) semester .5 credits

This course studies the interrelationships between plants and animals and their environments. Emphasis is placed on the wildlife of North Central Pennsylvania and the role man has in managing their habitat. **Prerequisite: Students must have successfully completed Biology CP or Biology. (Grades 10-12) Offered in the fall only.**

Keystone Remedial Biology (314) semester .5 credits

This course is designed for students who did not reach the required points (1500) to pass the Biology Keystone but had above 1470 points. This is a one-semester course. Students will be given an individual program based on the areas of the Keystone in which he or she was deficient. Each student will be given a study guide to use which includes Keystone concepts, BIG ideas and vocabulary important to the topic. Assessing will be individual in order to prepare each student to retake the Keystone during the winter testing session. Activities will include facilitating one or two classes on a topic the student is studying to show understanding and reinforce information for class as well as Study Island and CDT testing.

TECHNOLOGY EDUCATION

COURSE	GRADE	LENGTH	CREDIT
Advanced STEM	**9, 10, 11, 12**	**semester**	**.5**
Cabinet Making	**11, 12**	**semester**	**.5**
Computer Aided Design I (CAD I)	**9, 10, 11, 12**	**semester**	**.5**
Computer Aided Design II (CAD II) DE**	**10, 11, 12**	**semester**	**.5**
Intro to Engineering 9-10	**9, 10**	**semester**	**.5**
Intro to Engineering 11-12	**11, 12**	**semester**	**.5**
Manufacturing Systems	**10, 11, 12**	**semester**	**.5**
STEM II	**9, 10, 11, 12**	**semester**	**.5**
Robotics 101	**9, 10, 11, 12**	**semester**	**.5**
Wood I	**10, 11, 12**	**semester**	**.5**
Wood II	**10, 11, 12**	**semester**	**.5**

****DE: <u>DUAL ENROLLMENT: ADDITIONAL REQUIREMENTS APPLY INCLUDING STUDENT'S GRADE LEVEL REQUIRED IN ORDER TO RECEIVE COLLEGE CREDIT. CHECK WITH PRINCIPAL.</u>** Eligible students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet is available in the Principal's office.

TECHNOLOGY EDUCATION COURSES & ELECTIVES

Wood I (633) semester .5 credits

Woodworking I is a project-oriented course in which students will be exposed to all phases of basic woodworking techniques. Students do not need experience with wood or woodworking machines, but will need to bring self-motivation and desire to class with them. Students will work individually (with instructor assistance) on a project made of wood which is chosen to match their interests and needs.

Wood II (634) semester .5 credits

Students will develop a basic understanding of cabinet making, materials, and layouts. Students should also demonstrate a basic understanding for the elements of joiner, fastening and processes involved in quality cabinetry. Students must utilize the computer controlled router and/or laser engraver on their projects. **Prerequisite: Wood I (Grades 10-12)**

Cabinet Making (663) semester .5 credits

Students should develop an understanding of the history of cabinet making, materials, and layouts. Skills will be developed in order for students to utilize tools, machines, joinery, and processes for problem solving. Students should develop an understanding for special fixtures utilized in the production of trim and casework. Students will also learn the processes involved in quality cabinetry. **Prerequisite: Wood I, Wood II (Grades 11-12)**

Manufacturing Systems (643) semester .5 credits

Manufacturing Systems is an introductory course in which students analyze technical systems and various types of manufacturing processes, produce and investigate manufacturing outputs and aspects of research, development, and problem solving as they identify, design and produce products in a manufacturing technology laboratory. **Prerequisite: Wood I (Grades 10-12)**

SCIENCE/TECHNOLOGY EDUCATION REQUIREMENT

STEM II (660) semester .5 credits

Students will use the knowledge and concepts taught in STEM I to explore in greater depth the various areas of technology. Students will work along or in pairs while progressing through a series of curriculum-guided systems, include:

1. Mechanics and structures
2. Computer Graphics
3. Science and Data Acquisition
4. Publishing and Multimedia
5. Alternative and Renewable Energy
6. Robotics and Control Technology
7. Circuitry
8. Computer Simulation

Learning will be computer-based and all modules have hands-on activities or projects. Students will rotate through the 12 stations once every 7-10 days. During each engagement they design projects, test their ideas, and create e-Portfolios to document their learning. **(Grades 9-12)**

TECHNOLOGY EDUCATION ELECTIVES

Computer Aided Design I (CAD I) (698) semester .5 credits

This course introduces computer-aided design (CAD) and examines the hardware that makes up a CAD workstation. It also covers the operating system (Windows) that enables the equipment to function as a unit. Students will use display and editing techniques, as well as, obtain information about their drawings and work with drawing files. **(Grades 9-12)**

Computer Aided Design II (CAD II) (769) semester .5 credits

In this course the students will use previous knowledge learned in CAD I and expand upon it. The students will learn such commands as Extrude, Union, Subtract, and Solid. They will use these commands to construct 3-dimensional objects. The students will also learn how to draw an Isometric drawing from an Orthographic drawing. This knowledge will help students be able to read and follow plans for a project that they may encounter. It will also allow them to be able to construct their own plans for a project. **(Grades 10-12) Certain grade-level eligible students can also obtain college credit through the dual enrollment program.**

STEM (Science, Technology, Engineering, Math) ELECTIVES

Intro to Engineering 9-10 (742) **semester** **.5 credits**

This course provides a hands-on approach to understanding the fundamental principles of modern engineering. Students will extend their existing physics and mathematics knowledge to the analysis of vehicle dynamics, along with integrating physical systems in the design of modern machinery. Modular class structure with a series of workshops will provide authentic connections to modern engineering, culminating with a final design project. Students will be working on open-ended class engineering projects. **(Grades 9-10) (Prerequisite: strong motivation and a solid foundation in algebraic concepts.)**

Intro to Engineering 11-12 (743) **semester** **.5 credits**

This course provides a hands-on approach to understanding the fundamental principles of modern engineering. Students will extend their existing physics and mathematics knowledge to the analysis of electrical, mechanical, and hydraulic systems. This course will introduce the student to the basics of control theory, including transfer functions, state space models and complex plane analyses. This course is intended for students in **grades 11 and 12 only.** The material presented in this course is done so at a more advanced level than Intro to Engineering 9-10. **(Grades 11-12) (Prerequisite: strong motivation and a solid mathematics foundation)**

Robotics 101 (370) **semester** **.5 credits**

This course is designed to be an introductory course to the world of robotics. Students will work through the Carnegie Mellon introductory programming curriculum to learn basic programming language. Students will build a robot that will eventually include all the most commonly used inputs and outputs (for example, motors and sensors) in robotics. They will learn how to use the inputs and outputs together to make the robot complete tasks. At the completion of course students will use their knowledge to design a robot to solve specific problems. Students who are interested in this course should possess an interest in math as well as science.
(Grades 9-12)

VOCATIONAL TECHNICAL EDUCATION

COURSE	GRADE	LENGTH	CREDIT
Automotive Mechanics DE**	10, 11, 12	3 years	3/year
Building Construction Occupations	10, 11, 12	3 years	3/year
Engineering Technology	10, 11, 12	3 years	3/year
Heavy Equipment Maintenance DE**	10, 11, 12	3 years	3/year
Welding	10, 11, 12	3 years	3/year

***All of these courses are offered at Seneca Highlands Career & Technical Center.**

***Must complete an application and return it to the School Counseling office to be considered for one of the available openings.**

**** Dual enrollment courses offered through Pennsylvania College of Technology. See the course instructor for details.**

Other Career and Technical Center courses offered:

- **Network Systems Technology - found on page 40**
- **Culinary Arts - found on page 50**
- **Early Childhood Development - found on page 51**
- **Health Assistant - found on page 54**
- **Homeland Security – found on page 79**

Automotive Mechanics* (752: morning) year 3 credits/year

***This course is a PDE approved program offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

Students will perform service, repair, and maintenance procedures on various makes and models of gas powered engines. 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, aftermarket manufacturers, and supplies. **Work shirts/pants and/or coveralls are required (These are ordered and purchased at the CTC.) along with safety glasses and work boots/shoes.**

Career Opportunities:

- v General Service Technician
- v Parts Clerk
- v Front End Specialist
- v Auto Body Repair

****Dual enrollment course. Students can obtain college credit through Pennsylvania College of Technology. Enrollment information available at Seneca Highlands Career & Technical Center.**

PSI ~ PA State Inspection Certification

Building Construction* (754: morning) year 3 credits/year

***This course is a PDE approved program of study at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

Construction is about building a bigger picture: the planning, coordination, and control of a project from inception to deliver. 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 work on a variety of projects including sheds, decks, electric, plumbing, and drywall. **Safety must be maintained at all times in the shop. Students must supply their own 25' tape measure, and wear long pants. Work shirts/pants and/or coveralls are required (These are ordered and purchased at the CTC.) along with safety glasses and work boots/shoes.**

Career Opportunities:

- v Finish Carpenter/Rough Carpenter
- v Construction Management/Helper
- v Construction Business Owner
- v Electrician Helper

OSHA ~ Occupational Safety & Health Administration Certification

Vocational Technical Education (Cont.)

Engineering Technology

year **3 credits/year**

***This course is a PDE approved program of study at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

This technical program prepares students to apply knowledge and skills in the engineering field. Basic instruction is provided in a variety of areas associated with engineering such as civil engineering, electrical and electronic engineering, electromechanical instrumentation, industrial production and mechanical engineering. Instruction includes but is not limited to electrical circuitry, electronic instrumentation calibration, prototype development, test, inspecting, systems analysis and maintenance, applications to specific engineering systems, CAD/CAM, fluid power, heating and cooling, manufacturing systems, principles of mechanics, properties of materials, and report writing.

Career Opportunities:

- v Quality Control Inspector
- v Draftsman/CAD Operator
- v Machine Operator
- v Facility Maintenance

NIMS Certification – Cisco Certified – A+ = CompTIA

Heavy Equipment Maintenance Technology/Technician*

year **3 credits/year**

***This course is offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. This course is a Dual-Enrollment course. Please see the CTC for more information. (Grades 10-12)**

Students will learn how to service, diagnose, repair, and rebuild gasoline 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. This program provides training on Cummins virtual college. **(Grades 10-12) Work shirts/pants and/or coveralls are required (These are ordered and purchased at the CTC.) along with safety glasses and work boots/shoes.**

Career Opportunities:

- v Equipment Mechanics
- v Equipment Manager
- v Truck Mechanics
- v Parts Clerk

PSI ~ PA State Inspection Certification (Penn College 4 credits)

****Dual enrollment course. Students can obtain college credit through Pennsylvania College of Technology. Enrollment information available at Seneca Highlands Career & Technical Center.**

Vocational Technical Education (Cont.)

Welding Technology (778: morning) year 3 credits/year

***This course is offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the School Counseling office to be considered for one of the available openings. (Grades 10-12)**

The Welding field is ever-changing, offers flexibility, and maintains a high demand for future employment and careers. Students will be introduced to the basics of welding (Stuck, Tig, Mig, and Oxyfuel) and cutting processes (Oxyfuel, Plasma, and Air-Arc gouging). Students will 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. **Students will need to provide their own welding jackets, gloves, steel toed boots, vise-grips, tape measures, denim jeans, and cotton shirts.**

Career Opportunities:

- Engineering Inspection
- Military Support
- Pipeline Installation
- Project Management
- Robotics

AWS ~ Sense Level 1 – American Welding Society Certification

SOCIAL, HUMAN, & GOVERNMENTAL SERVICES

- **Interests and Abilities typical of this path**

Are you . . .

. . . polite, understanding, & patient?
. . . flexible?
. . . able to plan & direct others' activities?
. . . seen as a leader?
. . . sensitive and non-judgmental?
. . . composed in a crisis or conflict?
. . . able to take & follow directions?

Do you have . . .

. . . a concern for people & their problems?
. . . the ability to inspire trust & confidence?
. . . good physical skills?
. . . the ability to get along with a wide variety of people?

Do you like to express your feelings/ideas . . .

. . . creatively?
. . . in writing?
. . . through your speech in a clear manner?

Do you enjoy . . .

. . . helping others learn new things or acquire information?
. . . sharing ideas with others?
. . . reading about or studying how society works?
. . . learning about the interactions of individuals or groups of people?
. . . providing service to other people -- to give information, see to their comfort, or enhance their appearance?

Entry Level Careers

These careers require on-the-job training and/or minimal training:

Armed Services Career
Animal Worker
Library Clerk
Security Guard
Postal Service Worker
Border Patrol Agent
Hospital Interpreter
Social Welfare Trainee
Home Health Assistant
Meter Reader
Teacher's Aide
Nanny
Fire Cadet
Police Cadet
Geriatric Aide

Semi-Professional Careers

These careers generally require Technical/Community College and/or experience:

Paralegal Assistant
Crime Lab Technician
Social Director
News Reporter
Oil Firefighter
Corrections Officer
Postal Employee
Court Reporter
Preschool Teacher
Career Center Technician
Alcohol & Drug Counselor
Detective
Police Officer
Appraiser
Legal Secretary
Firefighter
Embalmer
Bailiff

Skilled & Professional Careers

For most of these careers you must successfully complete college/university entrance requirements. These careers generally require specialized schools or colleges/universities and experience:

Administrator
Psychologist
Social Worker
Demographer
Government Inspector
Foreign Service Worker
FBI Special Agent
Rehabilitation Counselor
Anthropologist
IRS Worker
Foreign Correspondent
Foreign Language Teacher
International Business Relations
Criminologist
Speech Pathologist
Court Reporter
Consumer Advocate
Sociologist
Interpreter
Political Consultant
Urban & Regional Planner
Divorce Mediator
Social Studies Teacher
Museum Curator
United Nations Worker
Public Relations Worker
Military Officer
School Counselor
Lawyer
Economist
Historian
City Manager
Probation Officer
Political Scientist
Fundraiser
Museum Worker
Cruise Director
ESL Teacher*
Utility Line Worker

***ESL: English as a Second Language**

FOREIGN LANGUAGES

COURSE	GRADE	LENGTH	CREDIT
French I [N]	9, 10, 11, 12	year	1.0
French II [N]	10, 11, 12	year	1.0
French III [N]	11, 12	year	1.0
French IV [N]	12	year	1.0
Spanish I [N]	9, 10, 11, 12	year	1.0
Spanish II [N]	10, 11, 12	year	1.0
Spanish III [N]	11, 12	year	1.0
Spanish IV [N]	12	year	1.0

[N] NCAA Core Courses

BONJOUR!

FRENCH COURSES

French I (431) **year** **1.0 credit**

French I introduces the student to the grammar and vocabulary of the language as well as the culture of France and other French speaking countries. Special emphasis is given to developing communication, listening, and writing skills. **Creativity is emphasized as students are assigned multiple creative activities to demonstrate their knowledge of the language. CP (Grades 9-12)**

French II (441) **year** **1.0 credit**

In French II, the student continues to learn basic grammar structures and vocabulary. The continual development of communication skills is stressed. Emphasis is also placed on reading and writing. **Students are given the opportunity to creatively express themselves through special projects including a French dinner. CP (Grades 10-12)**

French III (451) **year** **1.0 credit**

The French III course continues to develop the four language skills: reading, writing, listening, and speaking. Students are introduced to French history through a number of selected readings. Some attention is given to literature and composition. **Students are given the opportunity to creatively express themselves through dialogues and other assignments. CP (Grades 11-12)**

French IV (461) **year** **1.0 credit**

French IV continues to develop the four language skills. Canadian history is studied in anticipation of our Senior trip to Quebec. The History of France is also presented, with selected short stories studied in the target language. The geography and culture of different regions in France is also studied. **Creativity is emphasized through various projects such as brochures and maps as well as dialogues and compositions. CP (Grade 12)**

HOLA!

SPANISH COURSES

Spanish I (434) **year** **1.0 credit**

Spanish I introduces students to grammar, vocabulary, pronunciation, and cultural aspects of the language. Special emphasis is given to developing communication and listening skills. Projects and activities are often incorporated to reinforce what students are learning. The geography and culture of Spanish-speaking countries is also addressed. **CP (Grades 9-12)**

Spanish II (444) **year** **1.0 credit**

The main emphasis for Spanish II is grammar, with a continued focus on vocabulary. Students expand their ability to speak, read, and listen to Spanish. Projects and activities are completed to demonstrate knowledge and understanding of the language. Students learn the geography and culture of Spanish-speaking countries. **CP (Grades 10-12)**

Spanish III (454) **year** **1.0 credit**

In Spanish III, the students' speaking, reading, writing, and listening skills are improved. Grammar is strengthened, conversational situations are expanded upon, and reading and writing is emphasized. Students will complete projects and activities to further aid their understanding. Geography and culture focuses on Mexico and the Caribbean countries. **CP (Grades 11-12)**

Spanish IV (464) **year** **1.0 credit**

Spanish IV continues to improve speaking, reading, writing, and listening skills. There is a concentration on speaking and literature. Students do various projects and activities to further strengthen their abilities. The geography and culture of Spain is also taught. **CP (Grade 12)**

Homeland Security

Homeland Security (morning) year 3 credits/year

3 year program

***This course is a PDE approved program of study and is offered at Seneca Highlands Career & Technical Center. This course meets 4 periods every day. Students must complete an application and return it to the school Counseling office to be considered for one of the available openings. (Grades 10-12)**

A student in the Homeland Security 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:

- v Emergency Medical Technician
- v Municipal FireFighter
- v Security Guard

SAFETY & DRIVER'S EDUCATION & CO-OP

COURSE	GRADE	LENGTH	CREDIT
Driver's Education	*******	**6 hours**	**0**
Safety Education	**10**	**semester**	**.5**
Vocational Cooperative Education	**12**	**semester**	**.5**

***** Must be 16 years or older and have your Learner's permit or Driver's license**

SAFETY & DRIVER'S EDUCATION COURSES

Driver's Education **6 hours** **0 credits**

Driver Education consists of 6 hours of behind-the-wheel instruction in the safe and efficient use of an automobile. Also includes instruction on the motor vehicle code in a lab setting.
(Students must be 16 years or older & have your Learner's permit or Driver's license.)
*** Students must register for Driver's Education in the Principal's office.**

Safety Education (941) **semester** **.5 credits**

This classroom phase consists of 30 hours of instruction in road, motor vehicle, and other related areas of safety with a focus on defensive driving. Aspects and responsibilities of owning and maintaining a car are discussed and emphasized. The process of decision making, in relation to man-made and natural laws, is stressed throughout the course. **(Grade 10)**

COOPERATIVE EDUCATION PROGRAM

Vocational Cooperative Education (609) **semester or year** **.5 or 1.0 credits**

Co-op is a school-supervised work program. Its purpose is to help the student "bridge the gap" between school and the world of work. Students are placed on school-approved work sites where they learn and develop the skills necessary to survive on the job. Students will develop skills in the following areas: how to get a job, employer-employee relationships, money management, personal safety and other skills necessary for survival on the job. **Interested students must complete paperwork before participating in this program and receiving any credits. (Grade 12)**

SOCIAL STUDIES

COURSE	GRADE	LENGTH	CREDIT
The American Civil War	**10, 11, 12**	**semester**	**.5**
Contemporary American History [N]	**10, 11, 12**	**semester**	**.5**
Civics and Economics CP DE [N]**	**11**	**year**	**1.0**
Civics and Economics	**11**	**year**	**1.0**
AP® Human Geography	**10, 11, 12**	**year**	**1.0**
Psychology I DE [N]**	**11, 12**	**semester**	**.5**
Psychology II DE [N]**	**12**	**semester**	**.5**
Sociology [N]	**10, 11, 12**	**semester**	**.5**
Sociology II [N]	**10, 11, 12**	**semester**	**.5**
United States & PA History	**9**	**year**	**1.0**
United States & PA History CP [N]	**9**	**year**	**1.0**
Women in American History	**10, 11, 12**	**semester**	**.5**
World History	**10**	**year**	**1.0**
World History CP [N]	**10**	**year**	**1.0**

CP: College Preparatory

*** Weighted course**

****DE: DUAL ENROLLMENT: ADDITIONAL REQUIREMENTS APPLY. CHECK WITH PRINCIPAL.**
Eligible students can obtain college credit through Pennsylvania Highlands Community College. Enrollment packet is available in the Principal's office.

[N] NCAA Core Courses

SOCIAL STUDIES REQUIREMENTS

United States & Pennsylvania History (USPA) year 1.0 credit

This course is designed to give every student a chronological view of the development of the United States from the Civil War to the present. It is not the purpose of the course to give an in-depth study of this period, but rather to create an interest for a particular segment and segments of the era which the student may pursue on his or her own or in another course. **CP or General. (Grade 9)**

World History year 1.0 credit

Students will study eight significant and recurring themes in historical events. The eight themes are:

1. power and authority
2. science and technology
3. religion and ethical systems
4. empire building
5. revolution
6. cultural interaction
7. interaction with the environment
8. economics

These themes are presented to show that people in America, Europe, Africa, and Asia are more alike than they realize. Throughout history humans have struggled to better themselves and the world around them. Students will learn that past historical events are precursors to the present and affect the future. This course will begin with a brief review of the Middle Ages and will focus on the time frame from the European Renaissance to post World War II. **CP or General. (Grade 10)**

Civics and Economics year 1.0 credit

This course will cover three (3) subjects in order to prepare 11th grade students for the Keystone Civics exam.

A. Civics - This course of study will include theoretical and practical aspects of citizenship, its rights and duties; the duties of citizens to each other as members of a political body and to the government. It will also include the study of civil law, and the study of government with attention to the role of citizens in the operation and oversight of government.

B. American Government - The focus will be on the general principles of the American system of constitutional government. Emphasis is placed upon the organization and functions of the national government, legislative, executive, and judicial.

C. Economics - The focus will include studies in the following areas: theories of economics, capitalism and free enterprise, supply and demand, how prices are determined in markets, how economic performance is measured, labor and unions, banking, and government regulations. Concepts and utilizing those concepts will be a point of emphasis in addressing a variety of economic questions.

SOCIAL STUDIES ELECTIVES

The American Civil War (158) semester .5 credits

This course is designed to cover the history of events leading up to and through the American Civil War. Topics we will examine throughout the course will include, but not be limited to: the causes of the war, including slavery, trade and cultural differences, the battles, leaders, politics, slavery, food, geography, and people of that period of time. Finally, we will look at the results of the war, and the long-term effects of those results. We will also take time to examine the impact of the war on today's America. **(Grades 10-12)**

Contemporary American History (162) semester .5 credits

The student will study the social and cultural history of the United States from the end of World War II to the present. The course will attempt to show how the decades that followed the end of World War II impacted the present. The course will also look at the changing values and culture of the United States over the past 60 years, with an emphasis on the impact of social media, and its use to tell the story or point of view of an issue in American History. This course will also heavily focus on current events.
(Grades 10-12)

AP® Human Geography year 1.0 credits

Explore how humans have understood, used, and changed the surface of Earth. You'll use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. You will gain an understanding about information shown in maps, tables, charts, graphs, infographics, images, and landscapes, and you will connect geographic concepts and processes to real-life scenarios.
(Grades 10-12)

SOCIAL STUDIES ELECTIVES (Cont.)

Psychology I* (164) semester .5 credits

This course is designed to cover the issues and topics of psychology, the science of behavior, and mental processes. We will look at the behavior of people, even ourselves, throughout this course. The course will cover methods of research, behavior, senses, consciousness, learning, memory, motivation, and intelligence. **College Preparatory (Grades 11-12) * Students can also obtain college credit through the dual enrollment program. Students must complete BOTH Psychology I & Psychology II in the same year in order to receive credit. Enrollment packet is available in the Principal's office.**

Psychology II* (166) semester .5 credits

This course is designed to cover the issues and topics of psychology that were not included in Psychology I. We will continue to look at the behavior of people, including ourselves, throughout this course. The course will cover methods of motivation, child development, adolescence, sexuality, psychological disorders, and personality. **College Preparatory. Prerequisite: Psychology I (Grades 11-12)**
*** Students can also obtain college credit through the dual enrollment program. Students must complete BOTH Psychology I & Psychology II in the same year in order to receive credit. Enrollment packet is available in the Principal's office.**

Sociology I (165) semester .5 credits

This is a course that looks at the interaction of groups of people; not just how different groups interact, but also the interaction of the group. The course includes the basics of sociology, such as, culture, social interaction, adolescence and adults and their roles in society, and social stratification. If you are interested in people, you are in the right place. This course will not make you a sociologist, but I hope you will gain from it, a new understanding of human behavior that you can use in your life every day. **(Grades 10-12)**

Sociology II (167) semester .5 credits

This course is designed to cover the issues and topics within society. As a prerequisite, you must have taken and passed Sociology I, which provides you with the background to discuss the issues covered in this course. Issues we will examine throughout Sociology II will include, but not be limited to: Deviance and Social Control, Racial Issues in America, Politics, Education, Religion, Mass Media, Urbanization, Collective Behavior, Terrorism, and Death and Dying. **Prerequisite: Sociology I (Grades 10-12)**

SOCIAL STUDIES ELECTIVES (Cont.)

Women in American History (161) semester .5 credits

This course is designed to introduce and broaden understanding of the role of women in our American past. The course will attempt to strike a balance between describing the lives of average women and the lives of extraordinary women. The lives of individual women and the social movements emphasized (abolition, suffrage, labor, and others) will highlight for students the issues, conflicts, and historical times of the mass of women. Women living in all types of conditions and in all times have created meaning, purpose, beauty, and dignity in their lives despite the limitations placed upon them by the larger society. This course will explore those limitations and more importantly the accomplishments of the American woman. **(Grades 10-12)**

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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.

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DEPARTMENT OF EDUCATION

Pathway Criteria

CTE Concentrator

1 Artifact

- Industry-based competency certification
- Likelihood of industry-based competency assessment success
- Readiness for continued engagement in CTE Concentrator program of study

Alternative Assessment

1 Artifact

- Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010)
- Attainment of Gold Level or better on ACT WorkKeys
- Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient
- Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient
- Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient
- Successful completion of a pre-apprenticeship program
- Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4yr program for college-level coursework

Evidence-Based

3 Artifacts consistent w/student goals

ONE or more from Section One
No more than TWO from Section Two

Section 1

- Attainment of 630 or better on any SAT Subject Test
- Attainment of Silver Level or better on ACT WorkKeys
- Attainment of 3 or better on any AP Exam
- Attainment of 3 or better on any IB Exam
- Successful completion of any concurrent enrollment or postsecondary course
- Industry-recognized credentialization
- Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program

Section 2

- Attainment of Proficient or Advanced on any Keystone Exam
- Successful completion of a service-learning project
- Letter guaranteeing full-time employment or military enlistment
- Completion of an internship, externship, or cooperative education program
- Compliance with NCAA Division II academic requirements