

**2024-2025**



# **SOUTHMORELAND HIGH SCHOOL**

SOUTHMORELAND  
HIGH SCHOOL

## **PROGRAM OF STUDIES**

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**High Quality Learning For All**

# Introduction

Before starting the process of selecting courses for your schedule next year, please review the guidelines and procedures outlined on the next few pages. Your understanding and knowledge of this information will prove to be beneficial in selecting your academic program. We recommend that you select courses that are relevant, challenging and encompass your areas of interest and exploration related to your future plans. Students should plan a schedule to meet the demands of their future careers and post-secondary educational opportunities.

## Scheduling for 2024-2025

Schedule requests will be made through your CSIU Student Portal. Core courses (English, math, history and science) will be pre-selected by your current teachers. If you agree with those selections, you do not have to do anything. If you disagree with any of the selections, ***it is your responsibility to talk with your teacher and ask for a change in course recommendation.*** If you can not reach an agreement, your parent/guardian may complete a [Parent Override Form](#). Directions on how to schedule are available in your grade-level Counseling Google Classroom, and also under the scheduling tab of the Counseling website.

## Counseling Department

The Counseling Department's mission is to maximize student potential, nurturing students to assist them in becoming responsible, self-sufficient learners and productive citizens. Counselors advocate for all students to have access to the resources and support necessary to be successful academically, socially and emotionally. A comprehensive program approach allows for students to evaluate their own uniqueness, share their talents and adapt to new experiences. Students are assigned their school counselor by an alphabetical grouping of their last names.

**Mrs. Lauren Dillon: A-K**  
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**Mrs. Andrea Hanford: L-Z**  
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**Mrs. Desiree Pollard: Counseling Assistant**  
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## Counseling Services:

School counselors support students' ***academic*** success by:

- Leading development of a safe and caring school culture
- Delivering a school counseling program based on data identifying student needs
- Delivering information to students and teachers within the school counseling curriculum on best practices in mindsets and behaviors (i.e., learning strategies, self-management skills, social skills) and metacognition skills (McGuire, 2015) critical in academic success
- Providing relevance to academic effort and educational pursuits by assisting in students' career planning and future career-related goals

- Working with administration, teachers and other school staff to create a school environment encouraging academic success and striving to one's potential (Stone & Clark, 2001)
- Working to remove barriers to access and provide students with the opportunity for academic challenge in the most rigorous coursework possible
- Establishing data analysis methods to identify and target systemic barriers deterring equitable access
- Working to establish student opportunities for academic remediation as needed
- Emphasizing family-community-school relationships in addressing academic needs (Brown, 1999)
- Providing opportunities for students to:
  - Enhance their self-efficacy beliefs and competence
  - Develop attributional beliefs
  - See value in tasks related to achievement
  - Develop mastery/learning goals
  - Develop autonomy
  - Relate to others (Rowell & Hong, 2013) [www.schoolcounselor.org](http://www.schoolcounselor.org) [ 2 ]

School counselors support students' **career** development by:

- Providing opportunities to engage students in "life roles including learner and worker" (Gysbers, 2013)
- Providing learning and experiential opportunities for students to acquire behaviors and skills for career readiness (Gysbers, 2013)
- Working with students to identify their interests, abilities, specific career clusters (Stipanovic, 2010) and post-secondary plans (many states mandate an academic/career action plan as a graduation requirement)
- Helping students understand the connection between school and the world of work
- Helping students plan the transition from school to post-secondary education and/or the world of work (ASCA, 2014)
- Advising students on multiple post-secondary pathways (e.g., college, career-specific credentials and certifications, apprenticeships, military, service-year programs, full-time employment with a family-supporting wage) (Chicago Public Schools Multiple Post-secondary Pathways Framework)
- Connecting students to early college programs (e.g., dual credit/dual enrollment).
- Collaborating with administration, teachers, staff and decision makers to create a post-secondary readiness and college going culture
- Providing and advocating for individual pre-K through post-secondary students' college and career awareness through exploration and postsecondary planning and decision making, which supports students' right to choose from the wide array of options after completing secondary education
- Identifying gaps in college and career access and the implications of such data for addressing both intentional and unintentional biases related to college and career counseling
- Working with teachers to integrate career education learning in the curricula
- Providing opportunities for all students to develop the mindsets and behaviors necessary to learn work-related skills, resilience, perseverance, an understanding of lifelong learning as a part of long-term career success, a positive attitude toward learning and a strong work ethic
- Recognizing and supporting essential developmental factors key to future successes, such as self-efficacy and identity, motivation and perseverance (Savitz-Romer & Bouffard, 2013)

School counselors students' support **social/emotional** development as they:

- Collaborate with classroom teachers to provide the school counseling curriculum to all students through direct instruction, team-teaching or providing lesson plans for learning activities or units in classrooms aimed at social/emotional development (ASCA, 2019)
- Understand the nature and range of human characteristics specific to child and adolescent development
- Identify and employ appropriate appraisal methods for individual and group interventions that support 9-12 students' social/emotional development

- Know and utilize counseling theories to inform both direct and indirect services providing support to 9-12 students' social/emotional development [www.schoolcounselor.org](http://www.schoolcounselor.org) [ 70 ]
- Use assessment in the context of appropriate statistics and research methodology, follow-up assessment and measurement methods to implement appropriate program planning for social/emotional development
- Select and implement technology in a school counseling program to facilitate 9-12 students' social/emotional development
- Serve as a referral source for students when social/emotional issues become too great to be dealt with solely by the school counselor, including crisis interventions

School counselors focus their efforts on designing and implementing school counseling programs that promote academic, career and social/emotional success for all students. While implementing a school counseling program, school counselors:

- Deliver school counseling curriculum that proactively enhances awareness of mental health; promotes positive, healthy behaviors; and seeks to remove the stigma associated with mental health issues
- Provide responsive services including internal and external referral procedures, short-term counseling or crisis intervention focused on mental health or situational (e.g. grief, difficult transitions) concerns with the intent of helping the student return to the classroom and removing barriers to learning
- Recognize warning signs: changes in school performance ( grades, attendance), mood changes, complaining of illness before school, increased disciplinary problems at school, experiencing problems at home or family situation (stress, trauma, divorce, substance abuse, exposure to poverty conditions domestic violence), communication from teachers about problems at school and dealing with existing mental health concerns
- Provide school-based prevention and universal interventions and targeted interventions for students with mental health and behavioral health concerns
- Provide students with individual planning addressing their academic, career and social/emotional (including mental health) needs
- Educate teachers, administrators, parents/guardians and community stakeholders about the mental health concerns of students, including recognition of the role environmental factors have in causing or exacerbating mental health issues and provide resources and information
- Advocate, collaborate and coordinate with school and community stakeholders to ensure that students and their families have access to mental health services [www.schoolcounselor.org](http://www.schoolcounselor.org) [72]
- Recognize and address barriers to access mental health services and the associated stigma, including cultural and linguistic impediments
- Adhere to appropriate guidelines regarding confidentiality, the distinction between public and private information and consultation
- Direct students and parents to school and/or community resources for additional assistance through referrals that treat mental health issues (suicidal ideation, violence, abuse and depression)
- Help identify and address students' mental health issues while working within the ASCA's Ethical Standards; Competencies for School Counselors; and national, state and local legislation (Family Educational Rights and Privacy Act and Health Insurance Portability and Accountability Act), which guide school counselors' informed decision-making and standardize professional practice to protect both the student and school counselor
- Seek to continually update their professional knowledge regarding the students social/emotional needs

## ACT 158 Pathway Graphic



# 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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# Pathway Criteria

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

# Graduation Trail

*A Student's Journey*



**NOTE:** This infographic is designed to gauge progress in meeting statewide graduation requirements; however, it maps a sequential progression and assumes that the student has had an opportunity to meet the requirements of each Question. Students should be encouraged to fulfill criteria under multiple Pathways simultaneously to ensure statewide requirements will be met in a timely manner.

## Compliance Policy Statement

Title VI, Title IX, Section 504, A.D.A.

In compliance with the following statutes and regulations implementing Title VI of the Civil Rights Act of 1964 (Title VI), Title IX of the Educational Amendments of 1972 (Title IX), Section 504 of the Rehabilitation Act of 1973 (Section 504), Americans with Disabilities Act of 1990 (ADA) and the Age Discrimination Act of 1975 (ACT), the Southmoreland School District does not discriminate on the basis of race, color, national origin, religion, sex, disability, or age in its admissions, educational programs, activities, or employment practices.

The district commits itself to take whatever remedial action is necessary to rectify proven instances of discrimination where Title VI, Title IX, Section 504, ADA, and ACT are applicable. Inquiries concerning Title IX and Section 504 may be referred to Dr. Daniel Clara, Title IX and Section 504 Coordinator for the Southmoreland School District, whose office is located at the Southmoreland Primary Center, PO Box C/1431 Water Street, Alverton, PA 15612.

Our school counselors encourage the students to make realistic choices and course selections without regard to sex or disability.

## Graduation Credit Requirements

A requirement for graduation shall be the completion of required assessments and studies representing the instructional program assigned to grades nine (9) through twelve (12), which are aligned to establish academic standards. A minimum of twenty-five (25) credits is required for graduation and shall consist of the following credits earned in grades 9, 10, 11 and 12:

Course	Credits
English	4.00
Social Studies	4.00
Science	4.00
Math	4.00
Physical Education <b>(10, 11, 12)</b>	1.50
Health/PE <b>(9)</b>	0.50
Additional Electives	7.00
State Assessment	Proficient <i>or</i> Advanced on the Keystone Exams in Literature, Algebra I and Biology <b>OR</b> Demonstration of proficiency through alternate pathway
Career Readiness	Successful completion of the Career and Education Work Standards Portfolio <b>AND</b> Successful completion of Industry-Based Learning Experience <i>Students must be current with yearly components of their Career Portfolio by May 1 of each school year.</i>
<b>Total</b>	<b>25.00</b>

- Students are strongly encouraged to investigate college course requirements earlier rather than later, especially as some colleges recommend 2-3 consecutive years of study in a World Language.

## Credit Load and Grade Status

**The recommended MINIMUM credit load per year is 6 credits, plus physical education.** Students are required to take a minimum of 5 credits in their senior year, plus physical education. Grade level is determined by the number of credits earned, not by the number of years in high school.

<b><i>A student must complete the following minimum credits to advance to the next grade level:</i></b>	
Promotion from 9th to 10th	At least 5.0 credits
Promotion from 10th to 11th	At least 11.0 credits
Promotion from 11th to 12th	At least 17.0 credits

Make-up credits earned in Summer School will be added to your credit totals for grade level advancement.

In order to receive a diploma from Southmoreland School District, a student must have earned a minimum of 25.0 credits and successfully completed all graduation requirements. A student may participate in the commencement ceremony if **less than one credit** is needed to fulfill graduation requirements. Students should make arrangements with their school counselor to make up courses. A diploma will be issued after successful completion of required credit(s).

## Credit Recovery/Repeating a Course

- Beginning with the Class of 2026, the maximum number of credits earned through a credit recovery program will be limited to two (2) throughout a student's high school career. Additional credit recovery courses need to be pre-approved by the high school administrative team.
- Failed required courses must be made up in an approved accredited program, which may be offered at area school districts or via an online format. All associated fees are the student and/or family's responsibility.
- Students who fail more than one course must see a counselor for rescheduling and should take at least one of the failed courses during the summer. Courses must be completed and a passing grade of 60% or higher received prior to the start of the new school year. If a passing grade is not received, the course may be scheduled for that upcoming school year.
  - Special consideration: If a summer course passing grade is received within two (2) calendar weeks of the first day of school, *only then* will the course be removed from a student's schedule. All other scenarios must be discussed with your school counselor, immediately.
- Students repeating a course at Southmoreland High School will have both grades recorded on the transcript. Students **MUST earn a 60% or better** in the **pre-approved** summer school course to receive credit.
- A student may only repeat a course if he/she received a mark of **E, or failing percentage**, for that course.
- Credit recovery courses may impact NCAA eligibility. Students interested in collegiate athletics should work with their high school counselor prior to finalizing an option for credit recovery.

## Career Readiness Portfolio

As a measure of Future Ready PA reporting, Pennsylvania schools are held accountable for ensuring each student meets the Pennsylvania Career Education and Work (CEW) Academic Standards. The CEW standards focus on the following topics: **Career Awareness and Preparation (13.1), Career Acquisition (13.2), Career Retention (13.3) and Advancement and Entrepreneurship (13.4)**. Throughout a student's high school career at Southmoreland High School, he/she will partake in a variety of activities/experiences designed to meet the CEW standards. The culmination of all career readiness will result in a comprehensive Career Readiness Portfolio for each student.

By the end of **11th grade**:

- Students must have a minimum of eight (8) career artifacts (at least two (2) per grade level)
- Address each career strand at least once
- Individualized academic and career plan
- Career exploration through the use of Xello, a self-paced online program that allows students to build knowledge and skills while exploring post-secondary options.

**\*Students who do not participate in the activities and/or complete the associated artifact will be required to complete alternate activities/assignments to meet the corresponding CEW standards.**

## Industry-Based Learning Indicator

**ALL students must successfully complete one (1) of the following Industry-Based Learning Indicators:**

- Industry Standards-Based Competency Assessments (NOCTI/NIMS): Scoring *competent* or *advanced* by the end of the 12th grade (*CWCTC students only*)
- Industry Recognized Credential: Earn at least one industry recognized credential between grades 7 & 12
- Work-based Learning Experience: Complete a work-based learning experience between grades 7 & 12 as listed below.
  - Job Shadowing
  - Internships/Practicums (Paid or unpaid)
  - Cooperative Education Programs (CTE Program)
  - Career Mentoring Experience
  - Apprenticeship
  - Community-Based Work Programs
  - Service Learning (Unpaid)

## NCAA Requirements

Students who plan on participating in Division I, II or III college athletics are responsible for planning their academic studies in accordance with NCAA standards. Students considering participation in Division I or Division II intercollegiate sports programs after high school must register with the NCAA eligibility center ***no later than the end of the first semester, January, of the 10th grade year.*** It is recommended that students register as early as the end of their freshman year. College coaches cannot recruit seniors until students have registered with the NCAA. However, college coaches may begin the recruitment process as early as a student's sophomore year. A student must meet eligibility requirements by taking approved high school courses and completion of a college entrance exam, an ACT or SAT. Approved high school courses are indicated in this Program of Studies book with a black diamond (◆), and are listed on [page 13](#). Additional information is available in the Counseling Office or online at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

The NCAA Clearinghouse requires prospective students to send an official copy of their transcript and SAT and/or ACT scores. After registering online, student-athletes ***must notify their school counselor*** who will upload their transcript. Official test scores must be sent directly from the testing agency.

## NCAA Approved Core Course at Southmoreland High School

<b>Language Arts</b>	102 - English I
<b>Language Arts</b>	112 - English II
<b>Language Arts</b>	113 - Advanced English II ( <i>Pre-AP</i> )
<b>Language Arts</b>	122 - English III
<b>Language Arts</b>	128 - AP English III
<b>Language Arts</b>	132 - English IV
<b>Language Arts</b>	138 - AP English IV
<b>Mathematics</b>	301- Algebra I
<b>Mathematics</b>	310 - AP Precalculus
<b>Mathematics</b>	318 - Modern Geometry
<b>Mathematics</b>	319 - Advanced Modern Geometry
<b>Mathematics</b>	322 - Algebra II
<b>Mathematics</b>	323- Advanced Algebra II
<b>Mathematics</b>	324 - Advanced Algebra III
<b>Mathematics</b>	325 - Finite/ Statistics/ Trigonometry
<b>Mathematics</b>	331 - Algebra III
<b>Mathematics</b>	332 - Pre-Calc
<b>Mathematics</b>	342 - AP Calculus
<b>Mathematics</b>	343 - AP Statistics
<b>World Languages</b>	510 - Spanish I
<b>World Languages</b>	514 - Spanish II
<b>World Languages</b>	515 - Spanish III
<b>World Languages</b>	560 - Spanish IV
<b>World Languages</b>	520 - French I
<b>World Languages</b>	524 - French II
<b>World Languages</b>	525 - French III

<b>World Languages</b>	563 - French IV
<b>Science</b>	400 - Integrated Science
<b>Science</b>	412 - Biology
<b>Science</b>	413 - Advanced Biology ( <i>Pre-AP</i> )
<b>Science</b>	420 - Chemistry
<b>Science</b>	421 - Advanced Chemistry ( <i>Pre-AP</i> )
<b>Science</b>	422 - Microbiology
<b>Science</b>	436 - Anatomy and Physiology
<b>Science</b>	437 - Exploring the Physical Sciences
<b>Science</b>	439 - Physics
<b>Science</b>	441 AP Physics I
<b>Science</b>	442 - AP Biology
<b>Science</b>	443 - AP Chemistry
<b>Science</b>	446 - Environmental Science
<b>Science</b>	447 - AP Physics 2
<b>Social Studies</b>	200 - Accelerated ( <i>Pre-AP</i> ) World History and Geography
<b>Social Studies</b>	205 - US History/ Civil War - 1939
<b>Social Studies</b>	215 - US History/ WWII - Present
<b>Social Studies</b>	217 - World History
<b>Social Studies</b>	232 - American Issues
<b>Social Studies</b>	235 - Introduction to Psychology
<b>Social Studies</b>	236 - Law and Justice
<b>Social Studies</b>	239 - AP United States History
<b>Social Studies</b>	240 - AP European History
<b>Social Studies</b>	241 - AP World History
<b>Social Studies</b>	242 - AP U.S. Government and Politics

## NCAA Initial Eligibility

### Core Courses

NCAA Divisions I and II require 16 core courses. *See the charts on page 15.*

**NCAA Division I requires 10 core courses** to be completed **prior to the seventh semester** (seven of the 10 must be a combination of English, math or natural/physical science that meet the distribution requirements below). These 10 courses become "locked in" at the start of the seventh semester and cannot be retaken for grade improvement.

It is possible for a Division I college-bound student-athlete to still receive athletic aid and the ability to practice with the team if he or she fails to meet the 10-course requirement, but would not be able to compete.

### Test Scores

**NOTE:** Please refer to the NCAA website regarding current test-optional policies that may be in place.

**Division I and Division II** use sliding scales to match test scores and core grade-point averages (GPA). The sliding scale can be found on page 15 and 16 or at [www.eligibilitycenter.org](http://www.eligibilitycenter.org). An ACT score is calculated by adding English, math, reading and science subscores.

When you register for the SAT or ACT, use the NCAA Eligibility Center code of **9999** to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.

### Grade-Point Average

Review Southmoreland's List of NCAA Courses on the NCAA Eligibility Center's website ([www.eligibilitycenter.org](http://www.eligibilitycenter.org)). Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.

**Division I** GPA required to be eligible for competition is 2.300 (corresponding test-score requirements are listed on [Sliding Scale A on page 16](#)).

**The Division II** core GPA requirement is a minimum of 2.000. (corresponding test-score requirements are listed on [Sliding Scale B on page 17](#)).

*The NCAA GPA is calculated using NCAA core courses only.*

Division I 16 Core Courses		Division II 16 Core Courses	
4 years	English	3 years	English
3 years	Mathematics (Algebra 1 or higher)	2 years	Mathematics (Algebra 1 or higher)
2 years	Natural/Physical Science (1 year of lab, <i>if offered</i> )	2 years	Natural/Physical Science (1 year lab, <i>if offered</i> )
1 year	Additional English, mathematics or natural/physical science class	3 years	Additional English, mathematics or natural/physical sciences
2 years	Social Studies	2 years	Social Science
4 years	Additional courses (from any area listed above, foreign language or comparative religion/philosophy)	4 years	Additional courses (from any of area listed above, foreign language or comparative religion/philosophy)

### NCAA Division I Sliding Scale A

Core GPA	SAT	ACT	Core GPA	SAT	ACT
3.550	400	37	2.850	770	56
3.525	410	38	2.825	780	56
3.500	430	39	2.800	790	57
3.475	440	40	2.775	800	58
3.450	460	41	2.750	810	59
3.425	470	41	2.725	820	60
3.400	490	42	2.700	830	61
3.375	500	42	2.675	840	61
3.350	520	43	2.650	850	62
3.325	530	44	2.625	860	63
3.300	550	44	2.600	860	64
3.275	560	45	2.575	870	65
3.250	580	46	2.550	880	66
3.225	590	46	2.525	890	67
3.200	600	47	2.500	900	68
3.175	620	47	2.475	910	69
3.150	630	48	2.450	920	70
3.125	650	49	2.425	930	70
3.100	660	49	2.400	940	71
3.075	680	50	2.375	950	72
3.050	690	50	2.350	960	73
3.025	710	51	2.325	970	74
3.00	720	52	2.300	980	75
2.975	730	52			
2.950	740	53			
2.925	750	53			
2.900	750	54			
2.875	760	55			

### NCAA Division II Sliding Scale B

Core GPA	SAT	ACT	Core GPA	SAT	ACT
3.300 & above	400	37	2.725	730	52
3.250	430	38	2.700	740	53
3.225	440	40	2.675	750	53
3.200	460	41	2.650	750	54
3.175	470	41	2.625	760	55
3.150	490	42	2.600	770	56
3.125	500	42	2.575	780	56
3.100	520	43	2.550	790	57
3.075	530	44	2.525	800	58
3.050	500	44	2.500	810	59
3.025	560	45	2.475	820	60
3.000	580	46	2.450	830	61
2.975	590	46	2.425	840	61
2.950	600	47	2.400	850	62
2.925	620	47	2.375	860	63
3.900	630	48	2.350	860	64
2.875	650	49	2.325	870	65
2.850	660	49	2.300	880	66
2.825	680	50	2.275	890	67
2.800	690	50	2.250	900	68
2.775	710	51	2.225	910	69
2.750	720	52	2.200	920	70 & above

For more information regarding NCAA eligibility, visit [www.eligibilitycenter.com](http://www.eligibilitycenter.com).

## Military Service Academies

Each senator and congressman is provided a quota of five (5) student placements at any one time for attending each Service Academy. When a student graduates, a vacancy occurs which the senator or congressman may then fill. Therefore, senators and congressmen may have one or more appointments in any given year to each of these academies. It is possible that in some years there is no vacancy.

Each member of Congress usually nominates ten (10) people for each appointment. The procedure is competitive. The ten (10) nominees for each appointment are submitted to the Academic Board of each respective academy and the best qualified candidate receives the appointment. The remaining candidates, who are qualified but do not receive the appointment, are placed on a list of qualified competitors. The candidates then use these lists to appoint candidates, in order of merit, to bring the academies to their authorized strength.

Some appointments to the academies are also available under special categories and conditions. For information on these methods, write to the respective academies and request bulletins and regulations on admissions. **THIS SHOULD BE DONE IN THE SPRING OF YOUR JUNIOR YEAR.**

Admissions Office  
U.S. Military Academy  
West Point, NY 10996  
[www.usma.edu](http://www.usma.edu)

Director of Admissions  
U.S. Air Force Academy  
Colorado Springs, CO 80840  
[www.usafa.edu](http://www.usafa.edu)

Director of Admissions  
U.S. Naval Academy  
Annapolis, MD 21402  
[www.usna.edu](http://www.usna.edu)

Director of Admissions  
U.S. Coast Guard Academy  
New London, CT 06320  
[www.cga.edu](http://www.cga.edu)

Students requesting congressional nominations for any of the service academies should write a separate letter to any or all of the following:

- The present U.S. Congressman from the congressional district of residence
- Each of the current U.S. Senators from Pennsylvania

### Merchant Marine Academy

Pennsylvania is allotted sixteen (16) appointments to the Merchant Marine Academy. Both Pennsylvania senators and each congressman make (10) nominations. The Merchant Marine Academy then conducts a statewide screening of the nominees and then selects the best-qualified sixteen (16) appointees on a competitive basis. For more information, write or visit:

Admissions Office  
U.S. Merchant Marine Academy  
Kings Point, NY 11024  
[www.usmma.edu](http://www.usmma.edu)

*NOTE: This information is intended as a guide only. Information is subject to change, with or without our knowledge. Refer to the individual websites made available above for the most current information at the time of consideration.*

## Course Selection Procedure

After students and their parents have carefully reviewed this Program of Studies, it is time to think about the course selection process. Students, with assistance from parents, school counselors and teachers, will develop their schedule for the upcoming year. In so doing, it is necessary that students note the following:

1. The ultimate responsibility for meeting high school graduation requirements and college entrance requirements lies with the student.
2. Students should make sure that they are aware of course prerequisites, course sequences, the level of difficulty of the course and graduation requirements as they make their course selections. Decisions should realistically assess student capabilities and ambitions.
3. Students requesting courses for which they have not been recommended will need a parent/guardian to submit a Parental Override Form. Once placement into the requested course has occurred, students will be required to remain in that course for the entire school year.
4. Students are not permitted to schedule a class for less than the required number of periods or clock hours for which the subject meets.

## Course Group

Courses at Southmoreland High School are grouped to allow students to make appropriate selections based on individual needs and goals. The grouping categories are Academic (A), College Preparatory (CP) and Advanced Placement (AP).

### **Academic (A):**

Required courses designated as academic (A) are appropriate for all students planning to enter military, trade school, two year college or work directly upon graduation.

### **College Preparatory (CP):**

Required courses designated as college prep (CP) are appropriate for students planning to continue their education

### **Advanced Placement (AP):**

Required courses designated as advanced placement (AP) are appropriate for college bound students desiring a more challenging curriculum and higher enrichment

## College In High School (CHS) Courses (Dual Enrollment)

Students have the opportunity to enroll in College In High School (CHS) Courses through a partnership that the Southmoreland School District has established with Mount Aloysius College and the University of Pittsburgh at Greensburg. This program allows students to earn college credits upon successful completion of specific, upper-level courses offered at Southmoreland High School. Students enrolled in certain classes will have the opportunity to purchase credits in the fall by completing the necessary paperwork and submitting payment to the college. Once courses are completed and grades finalized, the student can request an official transcript from the appropriate college. The course will be listed on the high school transcript, but the college-level credit will not. Southmoreland High School is unable to provide a college transcript.

This program allows students to earn college credits through their Southmoreland classes. These courses are taught by Southmoreland High School faculty who have passed the rigorous review process conducted by the college. Students may also elect to take these courses without earning the college credit.



Credits earned through a College In High School (CHS) Course have transferred to many colleges and universities. The student is responsible for checking their prospective colleges or universities to determine if the institution will accept the dual enrollment credits. The best way to determine this is to call the college or university you are interested in attending. At no time will your school counselor or teacher be able to assure or guarantee you of a course credit transfer.

CHS Courses offered through Mount Aloysius College and taught at Southmoreland High School by Southmoreland staff include:

- 128 - English III AP (ENGL111 - Rhetoric II, Introduction to Literature)
- 138 - English IV AP (EN102 - Introduction to Literature - 3 credits)
- 239 - AP American History (HS201 - American History to 1877)
- 240 - AP European History (HS102 - World Civilization Since 1500 - 3 credits)
- 242 - AP US Government (PS203 - American National Government - 3 credits)
- 310 - AP PreCalculus (MATH 113 - Precalculus - 3 credits)
- 342 - AP Calculus (CM117 - Calculus - 4 credits)
- 343 - AP Statistics (CM220 - Calculus - 3 credits)
- 422 - Microbiology (BIOL 210 - Microbiology - 4 credits)
- 441 - AP Physics 1 (SC105 - Physics 1 - 4 credits)
- 443 - AP Chemistry (CHEM101 - Chemistry I - 4 credits)

Through a partnership with the University of Pittsburgh at Greensburg, **juniors and seniors** interested in pursuing a post high school degree in education can begin their journey with a Social Foundations of Education course, taught by a Southmoreland High School teacher. Students will have the opportunity to purchase UPG college credits.



- 960 - Social Foundations of Education (EFOP101 - 3 credits)

## Advanced Placement Courses

Advanced Placement (AP) courses are presented in cooperation with the Advanced Placement Program of the College Board across many subject areas.

AP exams are scored on a 1-5 scale. Many colleges and universities award recognition for scores of 3,4 or 5. For some colleges, the recognition permits students to skip certain entry-level courses and enroll in more advanced level courses as a freshman. For others, college credits are awarded. Students may check for details on how AP test scores are managed for each college/university by contacting their college or university of choice.

Please keep in mind that it is the responsibility of the student to send AP scores to each school directly from the College Board. AP scores are made available to students in July through their College Board account.

The following AP courses are offered at Southmoreland High School:

- 128 - AP English III (11th grade)
- 138 - AP English IV (12th grade)
- 239 - AP American History
- 240 - AP European History
- 241 - AP World History
- 242 - AP US Government
- 310 - AP Precalculus
- 342 - AP Calculus
- 343 - AP Statistics
- 441 - AP Physics 1
- 442 - AP Biology
- 443 - AP Chemistry
- 447 - AP Physics 2
- 880 - AP Music Theory

## Schedule Change Procedures

Course selections made by students determine our master schedule, which in turn determines teaching staff and the type and amount of teaching supplies (ie, textbooks, science laboratory supplies, STEM activity supplies, etc.) we purchase. It is important that students and parents carefully select courses best suited to the student's needs, abilities and future plans. A program developed after careful consideration and consultation with counselors, parents and teachers should require few, if any changes. However, the following may be considered as valid reasons for requesting a schedule adjustment. **NO schedule changes will be accepted after the last day of school.** However, there may be valid reasons for requesting a change in course as listed below. NOTE: Students must exercise caution before requesting to drop a course to ensure that graduation, future goals and NCAA requirements (*when applicable*) are being met.

- **Changes will occur if the student is missing a required course for graduation, wants to take another course in lieu of a study hall or if a teacher makes a recommendation.** *Students are responsible for making up any missed work as a result of late enrollment in the course.*
- Students must have parent, teacher, school counselor and administrator permission to drop a course. Students who withdraw from any class after **the 5th school day of any semester**, as a result of administrative review, will receive an **E, or the failing % posted**, for that course for each subsequent nine weeks and for any exams. This course grade will be included in GPA calculations.
- No academic course level change will be considered without teacher input. When a teacher determines it is in the student's best interest to remain in the course, a parent conference/ telephone call will be held before further consideration is given to the request.
  - If permission is given for a course level change (ie, regular level to Advanced Placement level), parent/guardian must complete the Parent Override Form. Once the schedule has been adjusted, no further changes will be made to that course regardless of grade.
- Schedule change requests will not be granted based on lunch preference, teacher preference or time preference. **NOTE:** *Requests to change lunch period will only be considered for medical reasons and may require a note from a physician.*
- **Schedule change requests are not guaranteed.**
- Any of the above procedures are subject to administrative review and/or change.

## Work Release

Work Release is a non-credit opportunity for seniors who are meeting their graduation requirements. Students desiring work release must work four out of five school days and begin work prior to 2:30 p.m. Seniors playing a WPIAL sport must adhere to the credit requirement set by the WPIAL. Work release can be revoked at any time due to academic or discipline issues or poor attendance. Work release applications will be available on the Counseling Office website by August 1. Approval must be obtained by a parent/guardian, administrator and school counselor.

## College/Post-Secondary School Release

Seniors who are meeting their graduation requirements may be released to attend classes at approved post-secondary schools. Approval must be obtained by a parent/guardian, administrator and school counselor. Students may take college classes at their own discretion. Any courses taken at a local college/university may count towards the total credits needed for graduation if they include courses not currently offered at Southmoreland. Students would be responsible for all tuition/fees and transportation. Only courses that meet graduation requirements will be placed on the high school transcript, but will be limited to classes not offered at Southmoreland. Courses that are not offered at Southmoreland, not in excess of 8 total credits, may be factored into GPA and QPA.

College Board Exams, such as the SAT or ACT, may be required for admission to some colleges and universities. The Counseling Office will assist students with registering for college entrance exams on an individual basis as well as part of classroom instruction by the school counselors. Students will create a College Board account via individual basis, small group or classroom instruction, typically in either the spring of their sophomore year or the fall of their junior year unless previously created.

**NOTE:** College entrance exam scores are NOT printed on high school transcripts and must come directly from the College Board or ACT if required by a college, university or other entity.

Fee waivers are available for both the ACT and SAT through the Counseling Office. To be eligible, a student must meet at least **one** of the criteria below:

- You're enrolled in or eligible to participate in the federal National School Lunch Program (NSLP).
- Your annual family income falls within the Income Eligibility Guidelines set by the USDA Food and Nutrition Service.
- You're enrolled in a federal, state or local program that aids students from low-income families (e.g. Federal TRIO programs such as Upward Bound).
- Your family receives public assistance.
- You live in federally-subsidized public housing, a foster home, or are homeless.

To obtain a fee waiver, email your school counselor.

### **PSAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT)**

The PSAT will be taken by all **JUNIORS** at Southmoreland High School. The Educational Testing Service, on behalf of the College Entrance Examination Board and the National Merit Scholarship Corporation (NMSC), offers the Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) each October. This two-hour test is similar to the Scholastic Aptitude Test (SAT) and measures critical reading, writing and math problem-solving skills. Taking the PSAT/NMSQT is the first step to entering the scholarship programs administered by NMSC and can provide advance indication of college capability that can be used to make a wise, realistic choice of college. Publications that furnish additional information about the PSAT/NMSQT and the scholarships administered by the National Merit Scholarship Corporation are available at <http://www.collegeboard.com/student/testing/psat/about.html>.

**SAT - (Writing, Critical Reading and Mathematics Sections)**

The Scholastic Aptitude Test is scheduled for three hours and 45 minutes. To register, for more information, practice questions, scoring guides, fee waivers, free downloads, etc. visit <http://www.collegeboard.org>.

**2023-2024 *Anticipated* SAT Testing Dates**

<i>ANTICIPATED TESTING DATES</i>
August 24, 2024
October 5, 2024
November 2, 2024
December 7, 2024
March 8, 2025
May 3, 2025
June 7, 2025

## **ACT - American College Testing Program**

Some colleges require the ACT as part of their admissions or placement procedures. The ACT is made up of four tests, each averaging about forty-five minutes. Test items are designed to measure ability to perform the kinds of intellectual tasks that college students typically perform. The tests are concerned with intellectual skills and abilities, not with specific and detailed content. The English examination is primarily a test of appropriate and effective written expression. Most items are concerned with elements of diction, style, phraseology, form and organization; other items are related to the mechanics of writing.

The mathematics test is concerned with mathematical reasoning, mathematical skills and concepts. The tests in social studies and natural sciences are designed to measure the ability to reason and solve problems. They also include items that test knowledge of information sources and capacity for special study. A total score of these four tests provides an estimate of ability to succeed academically in college.

The writing exam is optional. It is recommended that students take this test since many colleges require it. The ACT is given periodically throughout the school year. Most colleges and scholarship agencies participating in the ACT program recommend that prospective applicants take the test late in the junior year or as early as possible in their senior year. Register online at [www.actstudent.org](http://www.actstudent.org).

### ***ACT Anticipated Testing Dates, 2024-2025***

TEST DATE
June 8, 2024
July 13, 2024
September 7, 2024
October 26, 2024
December 7, 2024
February 8, 2025
April 12, 2025
June 7, 2025

## ASVAB Career Exploration Program

The ASVAB is a timed, multi-aptitude test, which is given to measure a student's aptitude in four critical areas - arithmetic reasoning, word knowledge, paragraph comprehension and mathematics knowledge. **All SOPHOMORES** will participate in the ASVAB testing during school hours. **Any junior or senior** who is interested in taking the test will be able to sign up in the Counseling Office. **There is no charge for the test.**

Juniors and seniors can use scores from the ASVAB to enlist in the military after graduation. *Students are under no obligation to join the military as a result of taking the ASVAB nor will students be contacted by military personnel as a result of the test.* The ASVAB Career Exploration Program is designed to assist with career exploration, regardless of future educational and career plans students may be considering.

## Scholarship & Financial Information

Students seeking scholarships and/or financial aid information should contact their school counselor and refer to the Southmoreland High School Counseling Department's web page ([click here](#)). Other resources available to search for scholarship monies include listings in college handbooks and college/ university websites. Students interested in financial aid should research the colleges or universities of their choice to find out what is available and how to apply. It is the student's responsibility to meet the deadlines regarding financial aid.

Students and families are encouraged to do their own scholarship searches as the counseling office receives a fraction of all scholarships available with the majority of those being local scholarships. When scholarships are received in the counseling office, they are made available on the SHS Counseling website under the SCHOLARSHIPS tab.

Please refer to the Southmoreland High School Counseling website as additional online resources are included there, but are not limited to the following:

- [www.capex.com](http://www.capex.com)
- [www.educationplanner.org](http://www.educationplanner.org)
- [www.fastweb.com](http://www.fastweb.com)
- [www.salliemae.com](http://www.salliemae.com)
- [www.scholarsnapp.org](http://www.scholarsnapp.org)

**Financial Aid Night** is typically held in the fall at either Southmoreland High School or Mount Pleasant Junior-Senior High School in alternating years. *The 2024-2025 school year Financial Aid Night will be held at Southmoreland High School.* The information provided by a PHEAA representative will help students and parents understand the types of financial aid that may be available to them, as well as explain the process involved with applying for financial aid. The event's date and time will be announced in the beginning of the school year via the Google Classrooms, morning announcements, SHS web page, SHS Counseling web page, and robocalls to parents/ guardians.

## Keystone Testing

The Keystone Tests are end-of-course assessments designed to evaluate proficiency in the content areas of Algebra I, Literature and Biology. These tests are a requirement for graduation for all students. In order to satisfy the Every Student Succeeds Act (ESSA, 2015), all students that have not already completed a Keystone Exam must participate in the Algebra I, Literature and Biology Keystone Exams before the completion of the second semester of the 11th grade year. Additionally, students in any grade who are enrolled in a Keystone-related course will participate.

Exam scores will be sent to the school district and a copy of the score report will be sent home to parents/guardians.

Because of the importance of these tests, parents are asked not to schedule vacations or medical appointments during their administration and to encourage their children to eat and sleep well. Parents have the right to examine the tests in the school prior to the testing dates. They also have the right to excuse their children from taking the tests for religious reasons. Parents may contact the Counseling Office with any questions pertaining to the tests.

The following options exist to meet the statewide graduation requirement:

### ***Keystone Proficiency Pathway:***

- A student earns a minimum score of proficient or advanced on each of the three (3) Keystone Exams - Algebra I, Literature and Biology.

### ***Keystone Composite Pathway:***

- A student earns a satisfactory composite score of 4452 on the Algebra I, Literature and Biology Keystone Exams by 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.
- The Pennsylvania Department of Education will designate the satisfactory composite score.

### ***Alternate Assessment Pathway:***

Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency **and** one of the following:

- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB);
- Gold Level on the ACT WorkKeys Assessment;
- Attainment of an established score on an Advanced Placement Program or an International Baccalaureate Diploma Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve at least a proficient score;
- Successful completion of a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;
- Successful completion of a pre-apprenticeship program; or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

### ***Evidence Based Pathway:***

Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency **and** demonstration of three pieces of evidence consistent with the student's goals and career plans, including

- One of the following:
  - Attainment of an established score on the ACT WorkKeys assessment, a SAT subject test, an Advanced Placement Program Exam, or an International Baccalaureate Diploma Program Exam;

- Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework;
- Attainment of an industry-recognized credential; or
- Successful completion of a concurrent enrollment or postsecondary course;
- Two additional pieces of evidence, including one or more of the options listed above, or:
  - Satisfactory completion of a service learning project;
  - Attainment of a score of proficient or advanced on a Keystone Exam;
  - A letter guaranteeing full-time employment;
  - A certificate of successful completion of an internship or cooperative education program; or
  - A satisfactory compliance with the NCAA's 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.

## Grade Point Average (GPA)

Because the GPA is based on final grades, the most accurate reporting of this value will occur on the final report card of the year. Courses included in the Program of Studies that carry credit toward graduation are assigned a grade point value based on the following weights in the chart listed below:

GRADE POINTS		
GRADE	ADVANCED PLACEMENT	ALL OTHER COURSES
A	5	4
B	4	3
C	3	2
D	2	1
E	1	0

## Class Rank

Class rank is determined by a cumulative total of quality points. Grades are assigned weighted quality point values according to the course group designation. Quality points are calculated by multiplying the course group grade points, as listed in the chart below, by the amount of course credit which can be located in the course description.

**To calculate a student's class rank:**

Course Group Grade Point (CG)	x	Credit Value (CV)	=	Quality Points (QP)
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Course Group Grade Points			
Grade	Academic Courses	College Prep Courses	Advanced Placement Courses
A	10	12	14
B	8	10	12
C	6	8	10
D	4	6	8
E	0	0	0

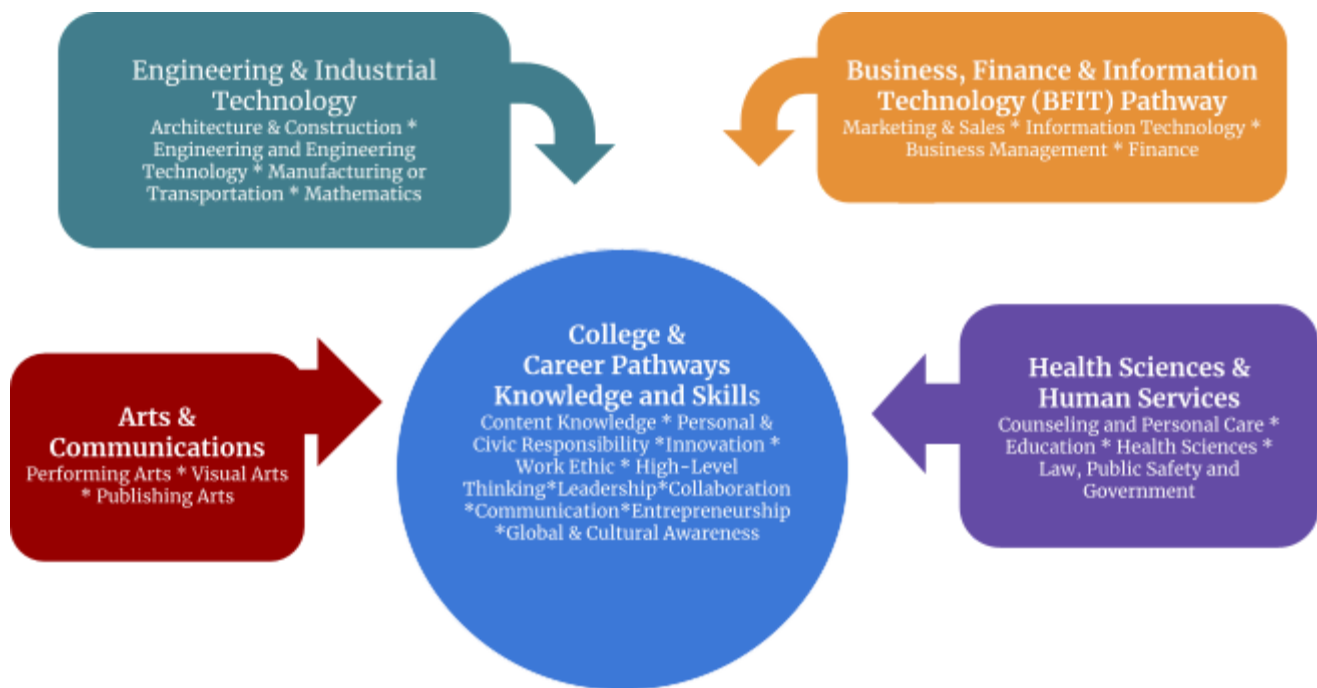
EXAMPLES				
Ex. 1 - CP English IV, Grade A				
(CG)		(CV)		(QP)
12	x	1.0	=	12
Ex. 2 - AP Biology, Grade A				
14	x	1.5	=	21 QP

⇒ Total quality points for all final grades earned determine class rank

⇒ Class rank calculations are cumulative and includes all final grades from 9 through 12

# Career and College Pathways

## *College and Career Clusters and Pathways*



According to the National Association of State Directors of Career Technical Education Consortium (2013), “The National Career Clusters™ Framework consists of 16 Career Clusters™ and related Career Pathways to help students explore different career options and better prepare for college and career. The Career Clusters™ and related Career Pathways serve as an organizing tool for schools, small learning communities, academies, and magnet schools to develop more effective programs of study and curriculum.” Each of the pathways is aligned to the Southmoreland High School’s Course of Studies to provide students an outline to follow when selecting courses and electives that are associated with a potential future career.

## ARTS & COMMUNICATIONS

*Designed to cultivate students' awareness, interpretation, application, and production of visual, verbal and written work.*

**PATHWAY FOCUS AREAS:**      Performing Arts (PA)                      Visual Arts (VA)                      Publishing Arts (PUA)

Are you interested in...	Can you...	Do you enjoy...
News Reporting & Writing	Sing	Making Videos
Interviewing & Reviewing	Play an Instrument	Working with Film Props
Multi-Media Production	Be Creative	Seeking Creative Ideas
Acting	Act	Working with South Effects
Radio, TV, Film, Video	Articulate Clearly	Performing for an Audience
Performing in a band, chorus	Write and Conduct Interviews	Working with Computers
Attending Concerts	Meet Deadlines	Drawing
	Write	Taking Photographs

If you answer "YES" to most of these questions, consider a future in one of the sample occupations which are listed below

Entry Level (OJT)	Technical/Skilled (1-3 Years)	Professional (4+ Years)
Model (PA)	Actor (PA)	Art or Music Teacher (PA, VA)
Radio Operator (PA)	Book Illustrator (PUA)	Film Editor (PA)
Stage Hand (PA)	Choreographer (PA)	Art or Music Critic (PA, VA)
Stunt Performer (PA)	Dancer (PA)	Music Director (PA)
Film Loader (VA)	Disc Jockey (PA)	Set Designer (PA)
Floral Designer/Florist (VA)	Musician (PA)	Photographer (VA)
Sound Technician (VA)	Talent Agent (PA)	Art Historian (VA)
Desktop Publisher (PUA)	Artist - Fine or Craft (VA)	Animator (VA)
Circulation (PUA)	Broadcast Technician (VA)	Artist - Fine or Craft (VA)
Copy Person (PUA)	Camera Technician (VA)	Industrial Designer (VA)
Newsroom Worker (PUA)	Fashion Designer (VA)	Graphic Designer (VA, PU)/Web Designer (PUA)
Announcer (PA)	Jeweler (VA)	Interior Designer (VA)
Dancer (PA)	Make-up Artist (VA)	Copywriter (PU)
Photographer (VA)	Retail Display (VA)	Journalist (PUA)
Graphic Production (VA, PUA)	Web Designer (PUA)	TV/Film Communications (PUA)
	Graphic Artist (PUA, VA)	Public Relations Manager (PUA)

## ARTS & COMMUNICATIONS

*Designed to cultivate students' awareness, interpretation, application, and production of visual, verbal and written work.*

### Electives for the Pathway

9th Grade	10th Grade	11th Grade	12th Grade
Concert Choral	Concert Choral	Concert Choral	Concert Choral
Scottie Singers	Scottie Singers	Scottie Singers	Scottie Singers
Symphonic Band	Symphonic Band	Wind Symphony	Wind Symphony
World Languages	Digital Image Production	Digital Image Production	Digital Image Production
Internet & Social Media	World Languages	World Languages	World Languages
Webpage & Mobile Apps	Game Programming	Game Programming	Game Programming
Graphics	Music Theory	Music Theory	Music Theory
Art I - Foundations of Art Studio	Multimedia Production for Social Media	Multimedia Production for Social Media	Multimedia Production for Social Media
Principles of Design	Commercial Graphics	Commercial Graphics	Commercial Graphics
	Prototyping	Prototyping	Prototyping
	Musical Arts 101/ 102	Musical Arts 101/ 102	Musical Arts 101/ 102
	Internet & Social Media	Internet & Social Media	Internet & Social Media
	Graphics	Graphics	Graphics
	Animation & Visual Effects	Animation & Visual Effects	Animation & Visual Effects
	Art I - Foundations of Art Studio	Art I - Foundations of Art Studio	Art I - Foundations of Art Studio
	Art II - Refined Studio Arts	Art II - <i>Refined Studio Arts</i>	Art II/Art III - <i>Refined/Advanced Studio Arts</i>
		Art III	Senior Studio
	<b>CWCTC Programs of Study</b>		
	Multimedia Design	Restoration & Design	Computer Information Science

## ENGINEERING & INDUSTRIAL TECHNOLOGY

*Designed to enhance students' interests, awareness, and application to careers related to technologies necessary to design, develop, install, and maintain physical systems*

**PATHWAY FOCUS AREAS:** Architecture & Construction (AC) Engineering and Engineering Technology (ET)  
Manufacturing or Transportation (MT) Mathematician (MM))

Are you interested in...	Can you...	Do you enjoy...
Building and Construction	Apply science and math	Travel
Tools and Equipment	Read and Understand Directions	Working with Your Hands
Woodworking	Solve Complex Problems	Design/Work with Projects, Models, and Prototypes
Math and Science	Organize Reports and People	Working in a lab setting
Engineering	Use a computer	Working on a team
Precision Work	Understand directives and read maps	Building with your hands
Design and Architecture		Operating tools and equipment
Engineering		Paying close attention to detail
How things work		

If you answer "YES" to most of these questions, you might consider a future in one of the sample occupations which are listed according to post-secondary training requirements

Entry Level (OJT)	Technical/Skilled (1-3 Years)	Professional (4+ Years)
Carpet Installer (AC)	Dozer Operator (AC)	Chemical Engineer (ET)
Drywall Worker (AC)	Electric Technician (MM)	Aeronautical Engineer (ET)
Roofer (AC)	Metal Engineering Tech (MM)	Aerospace Engineer (ET)
Machine Operator (MT)	Air Traffic Controller (ET, MT)	Airline Pilot (ET)
Laborer (C, MT)	Mech. Engineer Tech (MM, MT)	Electrical/ Mining Engineer (ET)
Bus Driver (MT)	Biomedical Engineering Tech (ET)	Architect (MM, ET)
Apprenticeships	Chemical/Civil/Electrical Engineer Tech (ET)	Mechanical Engineer (ET)
Brick Mason (AC)	Architectural Engineer Tech (ET)	Biomedical Engineer (ET)
Carpenter (AC)	Robotics Technician (ET)	Computer Network Eng. (ET, MM)
Electrician (AC)	CAD/CAM Tech (ET, MM)	Nuclear Engineer (ET,MM)
HVAC (AC)	Laser Technician (ET, MM)	NASA Scientist (ET,MM)
Plumber (AC)	Electro-Optics Tech (ET, MM)	Cost Estimator (AC)
Surveyor (ET)	Diesel Mechanic (ET)	Landscape Engineer (ET, AC)
	Bus/Truck Driver (MT)	Construction Manager (AC)

## ENGINEERING & INDUSTRIAL TECHNOLOGY

*Designed to enhance students' interests, awareness, and application to careers related to technologies necessary to design, develop, install, and maintain physical systems*

### Electives for the Pathway

9th Grade	10th Grade	11th Grade	12th Grade
Intro to STEM	Intro to STEM	Intro to STEM	Intro to STEM
Graphics	Graphics	Graphics	Graphics
Principles of Design	Intro to Biotechnology	Intro to Biotechnology	Intro to Biotechnology
Intro to Automation	Intro to Automation	Intro to Automation	Intro to Automation
Structural Engineering	Robotics - NXT	Robotics - NXT	Robotics - NXT
Electricity/Electronics	Structural Engineering	Competitive Robotics	Competitive Robotics
Energy & Power Systems	Electricity/Electronics	Structural Engineering	Structural Engineering
CAD 2D/ 3D	Energy & Power Systems	Electricity/Electronics	Electricity/Electronics
	Architecture	Energy & Power Systems	Energy & Power Systems
	Robotics Engineering	Architecture	Architecture
	CAD 2D/ 3D	Robotics Engineering	Robotics - VEX
	Commercial Graphics	CAD 2D/ 3D	CAD 2D/ 3D
	Screenprinting Studio	Commercial Graphics	Commercial Graphics
	Creative Design Lab	AP Physics 1	AP Physics 2
	<b>CWCTC Programs of Study</b>		
	Construction Trades	Robotic Engineering & Manufacturing	HVAC & Steamfitting
	Electrical Technology	Welding & Metal Fabrication	Restoration & Design

## BUSINESS, FINANCE AND INFORMATION TECHNOLOGY (BFIT) PATHWAY

*Designed to prepare students for the world of business, finance, and information services*

**PATHWAY FOCUS AREAS:** Marketing & Sales (MS)    Information Technology (IT)  
Business Management (BM)    Finance (F)

Are you interested in...	Can you...	Do you enjoy...
A business environment	Work easily with others	Group work
Office management	Organize your time efficiently	Managing budgets
Sales	Work with statistics	Organizing a project
Computers and technology	Use computers	Planning events
Presenting to groups	Pay attention to detail	Selling products and services
Advertising	Solve problems	Processing numbers
Record keeping	Work on a team	Preparing reports
Insurance	Work independently	Learn new programs

If you answer “YES” to most of these questions, you might consider a future in one of the sample occupations which are listed according to post-secondary training requirements

Entry Level (OJT)	Technical/Skilled (1-3 Years)	Professional (4+ Years)
Customer Services Rep (MS)	Computer Salesperson (MS)	Marketing Manager (MS)
Travel Agent (MS)	Retail Buyer (MS)	Certified Public Accountant (F)
Telemarketer (MS)	Bank Collection Officer (F)	Financial Planner (F)
Bookkeeper (F)	Tax Preparer (F)	Auditor (F)
Cashier (F)	Claims Adjuster (F)	Underwriter (F)
Billing Clerk (F)	Software Technician (IT)	Computer Security Specialist (IT)
Title Searcher (F)	Computer Programmer (IT)	System Analyst (IT)
Computer Operator (IT)	Production Support Analyst (IT)	Hospital Administrator (BM)
Administrative Assistant (BM)	Desktop Publisher (IT, MS)	Human Resource Manager (BM)
Bank Teller (BM)	Medical Secretary (BM)	Chief Executive Officer (BM)
File Clerk (BM)	Real Estate Agent (BM, MS)	Manufacturing Sales Rep (MS, BM)
Retail Sales Clerk (BM)	Restaurant Manager (BM, MS)	Bank President (BM, F)
Secretary (BM)	Sales Representative (BM, MS)	Pharmaceutical Sales Rep (MS)

**BUSINESS, FINANCE, AND INFORMATION TECHNOLOGY (BFIT) PATHWAY***Designed to prepare students for the world of business, finance, and information services***Electives for the Pathway**

9th Grade	10th Grade	11th Grade	12th Grade
World Languages	World Languages	World Languages	World Languages
Internet & Social Media	AP U.S. History	AP World History	Law & Justice
Webpage & Mobile Apps	AP European History	Law & Justice	AP U.S. History
	FST	AP U.S. History	AP U.S. Government
	Algebra III	AP European History	AP European History
	Webpage & Mobile Apps	FST	FST
	Multimedia Production for Social Media	Algebra III	Algebra III
	Game Programming	Webpage & Mobile Apps	Webpage & Mobile Apps
	Animation & Visual Effects	Multimedia Production for Social Media	Multimedia Production for Social Media
	Digital Image Production	Game Programming	Game Programming
		Animation & Visual Effects	Animation & Visual Effects
		Digital Image Production	Digital Image Production
		Advanced Computer Programming for Arduino	Advanced Computer Programming for Arduino
		<b>CWCTC Programs of Study</b>	
		Multimedia Design	Computer Information Science

## HEALTH SCIENCE & HUMAN SERVICES

*Related to the promotion of health and treatment disease, and to cultivate students' interest, skills, and experiences for careers related to family and human needs*

**PATHWAY FOCUS AREAS:** Counseling and Personal Care (CPC) Education (E)  
Health Sciences (HS) Law, Public Safety, and Government (LPG)

Are you interested in...	Can you...	Do you enjoy...
Lifespan Development	Organize Well	Helping and protection others
Family and social services	Plan and direct programs	Working with people
Teaching	Communicate well	Counseling & Advising People
Counseling	Assume Leadership	Working on scientific research
Health care environment	Work with a team	Serving others' needs
Science and medicine	Pay attention to detail	Making a contribution to society
Medical research	Use a computer and technology	Working with numbers
Pharmacy	Collect and analyze data	Working with research
Physical therapy	Work with science & math theories	Handling customer needs
Sports/Fitness	Work with people in need	

If you answer "YES" to most of these questions, you might consider a future in one of the sample occupations which are listed according to post-secondary training requirements

Entry Level (OJT)	Technical/Skilled (1-3 Years)	Professional (4+ Years)
Child Care Worker (CPC)	Certified Nursing Assistant (HS)	Registered Nurse (HS)
Hospital Worker (HS)	Cosmetologist (COC)	Funeral Director (CPC)
Home Health Aide (CPC)	Fashion Designer (CPC)	Speech & Language Pathologist (HS)
Library Assistant (E)	Dental Hygienist (HS)	Principal/Teacher/Librarian (E)
Armed Services Career (LPG)	Massage Therapist (CPC)	Ophthalmologist (HS, STM)
Bailiff (LPG)	Mortician (CPC)	City Manager (LPG)
Postal Services Worker (LPG)	Truck Driver (CPC)	Pharmacist (HS)
Security Guard (LPG)	Teacher's Aide (E)	Dietician (HS)
Utility Worker (LPG)	Licensed Practical Nurse (HS)	Lawyer (LPG)
Dialysis/EEG Technician (HS)	Fire Fighter (LPG)	Criminologist/Forensic Criminologist (LPG)
Animal Caretaker (HS)	Medical Lab/ Radiological Technical	Parole Officer (LPG)
Hazardous Waste Tech (STM)	Paralegal	Mental Health Counselor (CPC)
Nurse's Aid	Postmaster (LPG)	Physical/Occupational Therapist (HS)
	Respiratory Therapist (HS)	Physician (HS)/Veterinarian (HS, STM)

## HEALTH SCIENCE & HUMAN SERVICES

*Related to the promotion of health and treatment disease, and to cultivate students' interest, skills, and experiences for careers related to family and human needs*

### Electives for the Pathway

9th Grade	10th Grade	11th Grade	12th Grade
World Languages	World Languages	World Languages	World Languages
Internet & Social Media	AP Biology	Anatomy & Physiology	Anatomy & Physiology
Game Programming	Internet & Social Media	AP Physics 1	AP Physics 2
	Game Programming	AP Biology	AP Biology
	Multimedia Production for Social Media	AP Chemistry	AP Chemistry
	AP U.S. History	Algebra III	Algebra III
		FST	AP Statistics
		Intro to Psychology	FST
		Multimedia Production for Social Media	Intro to Psychology
		AP U.S. History	Multimedia Production for Social Media
		Law & Justice	AP U.S. Government
		AP World History	AP U.S. History
			Law & Justice
	<b>CWCTC Programs of Study</b>		
	Health Occupations Technology	Sports Medicine	Cosmetology
	Protective Services		

## SHS NEW COURSE OFFERINGS FOR 2024-2025

### 960 Growing Teachers in Our School

Group CP

All year — 6 days

Credit 1.0

Grades 11-12

Students in this course have the opportunity to develop a foundational understanding of the dynamics of schooling in society by addressing the cultural aspects that underlies society's educational ideas and practices. Through an interdisciplinary approach, readings and activities are designed for school practitioners, or those contemplating careers in education, to engage in the study of those cultural aspects and consequences. The general intent of foundational study is to introduce students to interpretive uses of knowledge germane to education and to establish a basis of lifelong learning through normative and critical reflection on education within its historical philosophical, cultural and social contexts. Special emphasis is focused on the role of schooling in cultivating the habits necessary for demographic citizenship which includes ongoing efforts to secure equitable and just social relations, and to advance the common good.

**Note:** *The course is offered through a partnership with the University of Pittsburgh at Greensburg. Students are able to earn college credits through UPG.*

# COURSE LIST

Language Arts						
Course #	Course	Group	Course Type	Length	Credit	Grade
102	<a href="#">English I</a>	CP	REQUIRED	All year — 6 days	1.0	09
112	<a href="#">English II</a> (Keystone Course)	CP	REQUIRED	All year — 6 days	1.0	10
113	<a href="#">Advanced (Pre-AP) English II</a> (Keystone Course)	CP	REQUIRED IN PLACE OF 112	All year — 6 days	1.0	10
122	<a href="#">English III</a>	CP	REQUIRED	All year — 6 days	1.0	11
128	<a href="#">English III</a>	AP	REQUIRED IN PLACE OF 122	All year — 6 days	1.0	11
132	<a href="#">English IV</a>	CP	REQUIRED	All year — 6 days	1.0	12
138	<a href="#">English IV</a>	AP	REQUIRED IN PLACE OF 132	All year — 6 days	1.0	12
154.3	<a href="#">Journalism I/ Introduction to News Writing</a>	CP	ELECTIVE	All year — 3 days	0.5	9-12
155	<a href="#">Journalism Production</a>	CP	ELECTIVE	All year — 6 days	1.0	10-12
155.3	<a href="#">Journalism Production</a>	CP	ELECTIVE	All year — 3 days	0.5	10-12
188.3	<a href="#">Creative Writing/ Literary Magazine</a>	CP	ELECTIVE	All year — 3 days	0.5	10-12

Social Studies						
Course #	Course	Group	Course Type	Length	Credit	Grade
200	<a href="#">Accelerated (Pre-AP) World History and Geography</a>	CP	REQUIRED IN PLACE OF 205	All year — 6 days	1.0	09-10
205	<a href="#">U.S. History/Civil War—1939</a>	CP	REQUIRED	All year — 6 days	1.0	09
215	<a href="#">U.S. History/WWII—Present</a>	CP	REQUIRED	All year — 6 days	1.0	10
217	<a href="#">World History</a>	CP	REQUIRED	All year — 6 days	1.0	11
232	<a href="#">American Issues</a>	CP	REQUIRED	All year — 6 days	1.0	12
235	<a href="#">Intro. to Psychology</a>	CP	ELECTIVE	Semester (1st) — 6 days	0.5	11-12
236	<a href="#">Law and Justice</a>	CP	ELECTIVE	Semester (2nd) — 6 days	0.5	11-12
239	<a href="#">United States History</a>	AP	REQUIRED IN PLACE OF 215/ ELECTIVE	All year — 6 days	1.0	10-12
240	<a href="#">European History</a>	AP	ELECTIVE	All year — 6 days	1.0	10-12
241	<a href="#">World History</a>	AP	REQUIRED IN PLACE OF 217/ ELECTIVE	All year — 6 days	1.0	11
242	<a href="#">U.S. Government</a>	AP	REQUIRED IN PLACE OF 232/ ELECTIVE	All year — 6 days	1.0	12

Mathematics						
Course #	Course	Group	Course Type	Length	Credit	Grade
301	<a href="#">Algebra I - Grade 9</a> (Keystone Course)	CP	REQUIRED	All year — 6 days	2.0	09
310	<a href="#">AP Precalculus</a>	AP	REQUIRED OR ELECTIVE	All Year — 6 days	1.0	11-12
318	<a href="#">Modern Geometry</a>	CP	REQUIRED	All year — 6 days	1.0	09-11
319	<a href="#">Advanced Modern Geometry</a>	CP	REQUIRED IN PLACE OF 318	All year — 6 days	1.0	09-10
322	<a href="#">Algebra II</a>	CP	REQUIRED	All years — 6 days	1.0	10-12
323	<a href="#">Advanced Algebra II</a>	CP	REQUIRED IN PLACE OF 322	All year — 6 days	1.0	10-11
324	<a href="#">Advanced Algebra III</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
325	<a href="#">Finite/Statistics/Trig.</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
331	<a href="#">Algebra III</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
342	<a href="#">AP Calculus</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	12
343	<a href="#">AP Statistics</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
350	<a href="#">Financial Literacy</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	12

Science						
Course #	Course	Group	Course Type	Length	Credit	Grade
400	<a href="#">Integrated Science</a>	CP	REQUIRED	All year — 6 days	1.0	09
412	<a href="#">Biology</a> (Keystone Course)	CP	REQUIRED	All year — 6 days	1.0	10
413	<a href="#">Advanced Biology (Pre-AP)</a> (Keystone Course)	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	09
420	<a href="#">Chemistry</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	10-12
421	<a href="#">Advanced Chemistry (Pre-AP)</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	10-12
422	<a href="#">Microbiology</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	12
434	<a href="#">Wildlife of Pennsylvania</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	12
436	<a href="#">Anatomy &amp; Physiology</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
437	<a href="#">Exploring Physical Science</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	11-12
439	<a href="#">Physics</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	10-12
441	<a href="#">AP Physics 1 w/LAB</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.5	10-12
442	<a href="#">AP Biology w/LAB</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.5	10-12
443	<a href="#">AP Chemistry w/LAB</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.5	11-12
446	<a href="#">Environmental Science</a>	CP	REQUIRED OR ELECTIVE	All year — 6 days	1.0	12
447	<a href="#">AP Physics 2 w/LAB</a>	AP	REQUIRED OR ELECTIVE	All year — 6 days	1.5	12
448	<a href="#">Conservation Science</a>	CP	REQUIRED OR ELECTIVE	All Year — 6 days	1.0	12

## Health and Physical Education

<i>Course #</i>	<i>Course</i>	<i>Group</i>	<i>Length</i>	<i>Credit</i>	<i>Grade</i>
900	<a href="#">Physical Education 4 Life</a>	A	All year — 3 days	0.5	10-12
930	<a href="#">Physical Education I/Health</a>	A	All year — 3 days	0.5	09

# ELECTIVE COURSES

World Languages					
Course #	Course	Group	Length	Credit	Grade
510	<a href="#">Spanish I</a>	CP	All year — 6 days	1.0	09-12
514	<a href="#">Spanish II</a>	CP	All year — 6 days	1.0	10-12
515	<a href="#">Spanish III</a>	CP	All year — 6 days	1.0	11-12
560	<a href="#">Spanish IV</a>	CP	All year — 6 days	1.0	12
520	<a href="#">French I</a>	CP	All year — 6 days	1.0	09-12
524	<a href="#">French II</a>	CP	All year — 6 days	1.0	10-12
525	<a href="#">French III</a>	CP	All year — 6 days	1.0	11-12
563	<a href="#">French IV</a>	CP	All year — 6 days	1.0	12

**Note:** *Students planning to attend a 4 year college or university should be aware that some institutions highly recommend, but may not require, at least 2 or 3 years of a foreign language .*

## Informational Sciences

<i>Course #</i>	<i>Course</i>	<i>Group</i>	<i>Length</i>	<i>Credit</i>	<i>Grade</i>
605	<a href="#">Internet &amp; Social Media</a>	CP	Semester (1st) – 6 days	0.5	09-12
606	<a href="#">Webpage &amp; Mobile Apps</a>	CP	Semester (2nd) – 6 days	0.5	09-12
636	<a href="#">Multimedia Productions for Social Media</a>	CP	All year – 6 days	1.0	10-12
666	<a href="#">Game Programming</a>	CP	All year – 6 days	1.0	10-12
667	<a href="#">Animation and Visual Effects</a>	CP	Semester (1st) – 6 days	0.5	10-12
668	<a href="#">Digital Image Production</a>	CP	Semester (2nd) – 6 days	0.5	10-12
670	<a href="#">Programming for the Arduino</a>	CP	All year – 6 days	1.0	11-12

## Science, Technology, Engineering & Math

Course #	Course	Group	Length	Credit	Grade
710	<a href="#">Principles of Design</a>	CP	All year — 3 days	0.5	09-10
720	<a href="#">Graphics</a>	CP	All year — 6 days	1.0	09-12
721	<a href="#">Introduction to STEM</a>	CP	All year — 3 days	0.5	09-12
722	<a href="#">Agricultural Science</a>	CP	All year — 3 days	0.5	10-12
723	<a href="#">Introduction to Biotechnology</a>	CP	All year — 3 days	0.5	10-12
725	<a href="#">Introduction to Automation</a>	CP	Semester (1st)— 6 days	0.5	10-12
726	<a href="#">Competitive Robotics</a>	CP	All year — 6 days	1.0	11-12
727	<a href="#">Structural Engineering</a>	CP	All year — 3 days	0.5	09-12
730	<a href="#">Robotics Engineering</a>	CP	All year — 6 days	1.0	10-12
731	<a href="#">Electricity/Electronics</a>	CP	Semester (1st) — 6 days	0.5	09-12
735	<a href="#">Energy &amp; Power Systems</a>	CP	Semester (2nd) — 6 days	0.5	09-12
737	<a href="#">Drones &amp; Avionics</a>	CP	All year — 3 days	0.5	11-12
739	<a href="#">Advanced Manufacturing</a>	CP	Semester (2nd) — 6 days	0.5	10-12
740	<a href="#">Commercial Graphics</a>	CP	All year — 6 days	1.0	10-12
751	<a href="#">CAD 2D AutoCAD</a>	CP	Semester (1st) — 6 days	0.5	09-12
752	<a href="#">CAD 3D Inventor</a>	CP	Semester (2nd) — 6 days	0.5	09-12
754	<a href="#">Graphics Prototyping</a>	CP	All year — 6 days	1.0	10-12
755.3	<a href="#">Life After High School (Classroom)</a>	CP	All year — 3 days	0.5	11-12
765.3	<a href="#">Life After High School (Internship)</a>	CP	All year — 3 days	0.5	11-12

Fine Arts					
Course #	Course	Group	Length	Credit	Grade
805	<a href="#">Art I</a> – <i>Foundations of Studio Art</i>	CP	All year — 3 days	0.5	09-10
811	<a href="#">Art II</a> – <i>Refined Studio Art</i>	CP	All year — 6 days	1.0	10-12
814	<a href="#">Art Applications</a> – <i>Advanced Studio Arts</i>	CP	All year — 6 days	0.5	11-12
814.3	<a href="#">Art Applications</a> – <i>Advanced Studio Arts</i>	CP	All year — 3 days	0.5	11-12
834	<a href="#">Senior Studio</a> – <i>Preparing for the Future</i>	CP	All year — 6 days	0.5	12
865	<a href="#">Symphonic Band</a>	CP	All year — 6 days	0.5	09-12
865.3	<a href="#">Symphonic Band</a>	CP	All year — 3 days	0.5	09-12
868	<a href="#">Instrumental Music Lab</a>	CP	All year — 3 days	0.5	09-12
870	<a href="#">Concert Chorale</a>	A	All year — 6 days	1.0	09-12
870.3	<a href="#">Scottie Singers</a>	A	All year — 3 days	0.5	09-12
872.3	<a href="#">Beginning Music Theory</a>	CP	Semester (First) — 6 days	0.5	10-12
873.3	<a href="#">Advanced Music Theory</a>	CP	Semester (Second) — 6 days	0.5	10-12
876.3	<a href="#">Musical Arts 101</a>	A	All year — 3 days	0.5	10-12
877.3	<a href="#">Musical Arts 102</a>	A	All year — 3 days	0.5	11-12
879	<a href="#">Advanced Musical Arts</a>	CP	All year — 6 days	1.0	11-12
880	<a href="#">AP Music Theory</a>	AP	All year — 6 days	1.0	11-12
881	<a href="#">Advanced Musicianship</a>	CP	All year — 6 days	1.0	11-12
882.3	<a href="#">Percussion Methods</a>	CP	All year — 3 days	0.5	09-12

Education					
<i>Course #</i>	<i>Course</i>	<i>Group</i>	<i>Length</i>	<i>Credit</i>	<i>Grade</i>
960	Social Foundations of Education	CP	All year — 6 days	1.0	11-12

# Central Westmoreland Career & Technology Center

## Technical Courses

***Note: Grades 10, 11 & 12 will earn 3.5 credits for the program and 0.5 credit for a Wellness course.***

972	Automotive Mechanics Technology
973	Construction Trades
975	Multimedia Design
976	Cosmetology
978	Culinary Arts
980	HVAC & Steamfitting
981	Aspiring Educators
983	Restoration & Design
985	Powerline
986	Auto Collision Technology
987	Electrical Technology
988	Service Occupations
989	Health Occupations Technology
990	Agricultural & Landscape Design
993	Welding & Metal Fabrication
994	Robotic Engineering & Manufacturing
995	Sports Medicine
996	Protective Services
997	Computer Information Science
998	Service Occupations

***All students who attend CWCTC will be required to take the Wellness course each year. Students will earn 0.50 credits towards their physical education requirements.***

931	Year one students
951	Year two students
952	Year three students

# Course Descriptions

◆ NCAA approved high school courses

🏠 Keystone Test Required

## LANGUAGE ARTS

**Note:** All English courses **require** a term paper and specific writing assignments. Failure to complete these specific requirements will result in a failing grade regardless of the nine weeks grades.

### 102 English I

REQUIRED CLASS

◆ Group CP

All year — 6 days

Credit 1.0

Grade 09

This course is designed to improve your reading, writing and speaking skills. Students who take this course will develop analytical and interpretive skills necessary for success in college. Students will study a variety of texts including fiction, nonfiction, and composition. Additionally, students will understand and use the writing process. Students will also develop a fundamental understanding of research activities. Maintaining an up-to-date, organized record of class work is a requirement for this course.

**Prerequisite:** None

### 112 English II

REQUIRED CLASS

🏠 ◆ Group CP

All year — 6 days

Credit 1.0

Grade 10

This course further explores and strengthens the essential elements of communication—reading, writing, thinking, speaking, and listening—through an array of fiction and nonfiction short stories, media, poetry, drama, and novels. Students will analyze and interpret that literature, think critically and creatively when approaching its literary topics, and write in a clear, clean, concise manner as they inform, research, persuade, analyze, entertain, and describe. Attention will be given to refine mechanical/usage/grammar conventions while encouraging students to meet proficient standards and reach or exceed mastery level skills.

**Prerequisite:** None

### 113 Advanced English II

REQUIRED CLASS

🏠 ◆ Group CP

All year — 6 days

Credit 1.0

Grade 10

This course is designed for students who wish to challenge themselves and enter the Advanced Placement track in English. From classical to modern pieces, students will hone their analytical and critical thinking skills to read, comprehend, and converse about the character, conflict, and thematic developments found in various genres of literature with an emphasis on World Literature: fiction and nonfiction short stories, media, poetry, drama, and novels.

As this course is writing intensive, students will prepare for the rigors of collegiate writing as they learn to develop and refine their voice, style, structure, (honest and thorough) research, and mechanics/usage/grammar to write in a clear, clean, concise manner. Students will be required to write for a variety of purposes—narrative, informational, argumentative, and literary analysis—concluding with the completion of an MLA research paper.

**Prerequisite:** Recommendation of Language Arts department

**122 English III**

**REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grade 11**

This is a survey course in American literature for college bound students. Emphasis is on the reading and analysis of major American writings. Students will continue to develop writing skills, with emphasis on expository and analytical writing based upon the course readings, including core units on the SAT. Those considering going on to college should take this course. A research paper is required.

**128 English III AP**

**REQUIRED CLASS**

◆ **Group AP** **All year — 6 days** **Credit 1.0** **Grade 11**

This course offers academically advanced students challenging, competitive and in-depth material in a seminar setting. While the anthology provides a core focus on American literature, culture and history, the class will also refine writing and research skills through research papers, reports and projects. The course also requires both in and out of class reading of novels, and a higher level of academic effort in class discussion. Students may take the AP exam to qualify for college credits.

**Prerequisite:** Recommendation of Language Arts department

**132 English IV**

**REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grade 12**

This course is designed to prepare students and provide a smooth transition between high school and college. Students will practice composition and study skills necessary for success in college and consist of a survey of literature with an emphasis on our literary heritage. The essential elements of communication will be a focus of this course including reading, writing, speaking, and listening which includes analyzing literature, writing for a variety of purposes, speaking formally, and conducting research. Students will be required to submit a Senior Project which includes a research component.

**138 English IV AP**

**REQUIRED CLASS**

◆ **Group AP** **All year — 6 days** **Credit 1.0** **Grade 12**

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods with a focus on the development of the English language. Students engage in close reading and critical analysis of imaginative literature to deepen understanding of the ways writers use language to provide meaning. Students will consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Completing the AP Exam and submitting a comprehensive research paper/project is a requirement of this course. This course is also dual-enrollment and allows students the opportunity to earn 3 college credits.

**Prerequisite:** Recommendation of Language Arts department

**154.3 Journalism I/Introduction to News Writing****ELECTIVE**

Group CP

All year— 3 days

Credit 0.5

Grade 09-12

This three-day course provides an overview of the history, evolution, current trends and ethics/standards of journalism. Students will read and view a multitude of new publications (both print and online) and programs to analyze the writing styles and current trends for news, features (columns, reviews, interviews, etc.), entertainment, sports and opinions/editorials. As students navigate that media, they will strengthen their research skills to uncover facts and broaden their critical thinking to expose biases/opinions.

With that foundation, students will learn how to write for the various styles of news and contribute their original work to the schoolwide newspaper/news magazine. Students will organize, revise and edit their writing (including mechanics, usage and grammar) to communicate with clear, clean and concise ideas per the ethics/standards of the field. Building communication skills will be essential as students gather accurate information from their communities (i.e. those in and outside of school) to report. Based on individual strengths, students will discover where their talents and capabilities best serve the leadership roles within the journalism staff.

**155 Journalism Production****ELECTIVE**

Group CP

All year— 6 days

Credit 1.0

Grades 10-12

This full-year course is designed for students who have shown proficiency and/or mastery of the research, critical thinking, communication, and writing skills taught in the "Introduction to Newswriting/Journalism" course. Through staff workshops, students will collaborate to brainstorm, collect, report, verify, revise, edit, design, and produce accurate, engaging, and quality news coverage for the school-wide newspaper/news magazine. **\*This course may be repeated for credit.**

**Prerequisite:** Teacher recommendation, Journalism I

**155.3 Journalism Production (3 Day)****ELECTIVE**

Group CP

All year— 3 days

Credit 0.5

Grades 10-12

**188.3 Creative Writing/Literary Magazine****ELECTIVE**

Group CP

All year — 3 days

Credit 0.5

Grade 10-12

Students who enjoy creative writing from basic to advanced will thrive in this course. This class is an introduction to all aspects of creative writing and communication leading to publication including writing, revision, editing and publishing and the creation of a schoolwide literature and arts magazine that will highlight student creative talents and abilities. Students will serve as writers, editors and publishers encompassing many aspects of the field of communications and publication with a focus on creative writing.

## **SOCIAL STUDIES**

### **200 Accelerated (Pre-AP) World History and Geography**

#### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 09-10**

Accelerated (Pre-AP) World History and Geography focuses deeply on the concepts and skills that have maximum value for college, career and civic life. This elective course is designed for those 9<sup>th</sup> & 10<sup>th</sup> grade students who intend to focus heavily on the humanities and to prepare them for future AP social studies courses. Accelerated (Pre-AP) World History and Geography has four units: one geography unit and three world history units that cover different historical eras. The geography unit is universal; all schools must teach it. Individual schools choose and implement the three World History units that best align with their local and state standards.

**Prerequisite:** Students must complete Grade 8 Social Studies with a minimum grade of 75 percent final grade.

### **205 US History/Civil War—1939**

#### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 09**

This year-long U.S. History course offers an introduction to the social, political, economic, and cultural history of the United States by examining the major events, turning points and influential figures from the beginning of the American Civil War to 1939. As students progress through each era of U.S. history they will study the impact of dynamic leadership and economic and political change on the rise of the United States to global prominence, the influence of social and political movements on societal change, and the importance of cultural and political developments. Over the course of the year students will examine secondary historical accounts and primary source documents in order to better understand the major transformations that led to the development of modern America. Major current event topics and governmental processes and procedures will be incorporated into the course when applicable. The course emphasizes the development of historical analysis skills such as comparing and contrasting, considering multiple perspectives, and analyzing cause-and-effect relationships. These skills are applied to text interpretation and in written and oral assignments that guide learners step-by-step through problem-solving activities.

### **215 US History/WWII—Present**

#### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 10**

This course is a study of U.S. Contemporary History which will emphasize events relating to domestic and foreign policy in the United States and abroad from 1939 to the present. During the course of the year, students will be introduced to and demonstrate knowledge about important people, places and events associated with this time period. Major current event topics and governmental issues and procedures will be incorporated into the course, when applicable. The CP student will be expected to participate in a knowledgeable exchange of views and independently develop research-based assignments.

**217 World History****REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grade 11**

World History is approached as a problems study, with emphasis on world affairs. Students will be introduced to the history of cultures other than their own. A necessary examination of geography, culture, politics and economics will be interwoven with a strong historical element. Major regions to be covered include: Southwest Asia, China, Southeast Asia, Europe, Russia, the Indian Subcontinent and Africa. Student assessment will be directed toward written assignments.

**232 American Issues****REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grade 12**

This course is a study of America Issues focusing on all three levels of government. Federal, Pennsylvania and local governments are covered in detail from their specific structures through their duties and powers. Along with a focus on government, the course will focus on our system of justice, centering on the constitution and its influence on court decisions. Aspects of civics, such as citizenship, government participation, public service and comparative political and economic systems will be emphasized, as well. The course will utilize current social, political and economic issues to give the students a better understanding of the foundations and implementations of the United States political system.

**235 Introduction to Psychology****ELECTIVE**

◆ **Group CP** **Semester — 6 days** **Credit 0.5** **Grades 11-12**

The course is an introduction into general psychology. Introduction to Psychology is a survey course of basic psychological approaches, theory and practical knowledge. During the course of the year, students will be introduced to and demonstrate knowledge about important people, approaches, theories, procedures, biological and social influences that are pertinent to the understanding of basic psychology.

**236 Law and Justice****ELECTIVE**

◆ **Group CP** **Semester— 6 days** **Credit 0.5** **Grades 11-12**

This course will include an introduction into the role of law in American society. A brief historical development of our legal system and its shaping of America will be included. Discussion of basic concepts and the due process philosophy will be discussed.

**239 United States History AP****REPLACES 215/ELECTIVE**

◆ **Group AP** **All year — 6 days** **Credit 1.0** **Grades 10-12**

Advanced Placement U.S. History is a college-level course in American History that covers U.S. History pre-Columbian period through the present. It is designed for the student who has shown exceptional ability in Social Studies. Highly developed critical thinking skills and proficiency in historical essay writing are necessary. Examinations, essays, research and supplemental reading assignments are similar to those given at the university level. Students are responsible for a summer assignment and a research project.

**Prerequisite:** Teacher Recommendation

**240 European History AP****ELECTIVE**

◆ **Group AP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 10-12**

Advanced Placement European History is a college level course in European History 1450-present. It is designed for the student who has shown exceptional ability in social studies. Highly developed critical thinking skills and proficiency in historical essay writing are necessary. Examinations, essays, research and supplemental reading assignments are similar to those given at the university level. Students are responsible for a summer assignment and a research project.

**Prerequisite:** Teacher Recommendation

**241 World History AP****REPLACES 217/ELECTIVE**

◆ **Group AP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 11**

This course explores the expansive history of the human world. You will learn facts and critical thinking skills necessary to analyze historical evidence. Five themes will be used as a frame of reference in the chronological study of our world's history: (1) Interaction between humans and the environment, (2) development and interaction of cultures, (3) state-building, expansion and conflict, (4) creation, expansion and interaction of economic systems, (5) development and transformation of social structures. You will acquire the ability to examine change over time, including the causation of events as well as the major effects of historical developments, the interconnectedness of events over time and the spatial interactions that have geographic, political, cultural and social significance. It is important for each student to develop the ability to connect the local to the global, and vice versa. You also will learn how to compare developments in different regions and in different time periods as well as contextualize important changes and continuities throughout world history.

**Prerequisite:** Teacher Recommendation

**242 United States Government and Politics****REPLACES 232/ELECTIVE**

◆ **Group AP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 12**

AP United States Government and Politics provides a college-level introduction to key political concepts, ideas, institutions, policies, interactions, roles and behaviors that characterize the constitutional system and political culture of the United States. Required foundational documents and Supreme Court cases are an integral part of the course and will be incorporated to help students understand philosophical underpinnings, significant legal precedents, political values of the U.S. political system, and relationships and interactions among political institutions, processes, and behavior. Both classic and contemporary scholarly writings in political science are also used to promote the comparison of political ideas and their application to recent events. Students successfully completing this course will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, develop evidence-based arguments, and critically analyze relevant theories and concepts and apply them appropriately to develop connections across the curriculum. In addition, they will complete a political science research project or applied civics project.

**Prerequisite:** Teacher Recommendation

## MATHEMATICS

### 301 Algebra I - Grade 9

#### REQUIRED CLASS

◆  **Group CP**      All year — 6 days      Credit 2.0      Grades 09

This course will teach the Common Core standards that are needed to be successful in higher mathematics. Topics to be taught in this course include: Exploring variables and open sentences, equations, linear functions, proportions, probability and rational numbers; solving and graphing linear equations using slope and intercepts, solving and graphing linear inequalities, solving systems of equations and equations involving absolute value, polynomials, and exploring rational expressions. This course will be scheduled for two consecutive periods.

**Prerequisite:** Test scores and Grade 8 math grade

### 310 AP Precalculus

#### REQUIRED CLASS

◆ **Group CP**      All year — 6 days      Credit 1.0      Grades 11-12

AP Precalculus centers on the modeling of functions. This research-based exploration of functions is designed to better prepare students for college-level calculus and provide grounding for other mathematics and science courses. Modeling, a central instructional theme, helps students come to a deeper understanding of each function type. Students study a broad spectrum of function types that are foundational for careers in mathematics, physics, biology, health science, social science, and data science. Students acquire and apply mathematical tools in real-world modeling situations in preparation for using these tools in college-level calculus.

**Prerequisite:** Test scores, Algebra I data and teacher recommendation

### 318 Modern Geometry

#### REQUIRED CLASS

◆ **Group CP**      All year — 6 days      Credit 1.0      Grades 09-11

You will analyze characteristics and properties of two and three dimensional geometric shapes and develop mathematical arguments about geometric relationships. Deductive and inductive reasoning will be used to solve problems.

**Prerequisite:** Test scores, Algebra I data and teacher recommendation

### 319 Advanced Modern Geometry

#### REQUIRED CLASS

◆ **Group CP**      All year — 6 days      Credit 1.0      Grades 09-10

You will analyze characteristics and properties of two and three dimensional geometric shapes and develop mathematical arguments about geometric relationships. Deductive and inductive reasoning will be used to solve problems. The material will be covered at a faster pace with more complicated problems, and Advanced Algebra topics will be introduced.

**Prerequisite:** Test scores, Algebra I data and teacher recommendation

**322 Algebra II** **REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grades 10-12**

Designed to build upon Algebra skills, linear functions progressing into quadratic functions. It reviews and builds on concepts of Algebra I, covering systems of equations, inequalities, quadratic and polynomial functions, and rational expressions. Creative approaches to problem-solving, communicating mathematical ideas, and real-world problem solving will be emphasized.

**Prerequisite:** Geometry and teacher recommendation

**323 Advanced Algebra II** **REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grades 10-11**

Designed to build upon Algebra skills, linear functions progressing into quadratic functions. It reviews and builds on concepts of Algebra I, covering systems of equations, inequalities, quadratic and polynomial functions, rational expressions, and logarithms. Creative approaches to problem solving. Communicating mathematical ideas, and real-world problem solving will be emphasized. The material will be covered at a faster pace with more complicated problems than Algebra 2 for students who wish to take AP Calculus their senior year.

**Prerequisite:** Test scores and teacher recommendation

**324 Advanced Algebra III** **REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grades 11-12**

This course is for the college bound student. It will review and reinforce Algebra II and Advanced Algebra II concepts and skills. You will study new topics that include logarithms, rational and exponential functions, matrices, sequences, analytical geometry and probability. This course is designed for the student to become better equipped for advanced courses in mathematics.

**Prerequisite:** Test scores and teacher recommendation

**325 Finite/Statistics/Trigonometry** **REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grades 11-12**

This course enables students to display, describe, transform, and interpret numerical information represented as data, graphs, or equations. It integrates statistical, algebraic, and trigonometric concepts, and also previews pre-calculus in its work with functions.

**Prerequisite:** Minimum of Algebra II or Advanced Algebra II, teacher recommendation

**331 Algebra III** **REQUIRED CLASS**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grades 11-12**

This course reviews and builds on concepts of Algebra II. Concepts such as systems of equations and inequalities, quadratic and polynomial functions and relations, rational and radical functions and relations will be reinforced. New topics will include exponential functions and relations, and probability.

**Prerequisite:** Teacher recommendation

**342 AP Calculus****REQUIRED CLASS**

◆ **Group AP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 12**

You will be presented a course in the calculus of functions of one real variable; topics in analytic geometry are also presented. You will be given selected exercises that require straightforward application of the material, as well as exercises which involve subtle use of new ideas in conjunction with concepts already developed. Students may take the AP exam for college credit.

**Prerequisite:** Teacher recommendation

**343 AP Statistics****REQUIRED CLASS**

◆ **Group AP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 11-12**

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

**Prerequisite:** Algebra II and teacher recommendation

**350 Financial Literacy****REQUIRED CLASS**

**Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 12**

Students need financial knowledge to ensure they make the best financial decisions. Whether it is completing transactions for daily use or analyzing investments for their future, students must understand how to use resources to develop economic growth. Topics will include understanding credit and credit cards including score reporting and credit reports; maximizing income; borrowing money; home mortgages; minimizing cost of postsecondary education; borrowing, saving and investing; banking; personal insurance policies; and, preparing and filing taxes at the federal, state and local levels.

**Prerequisite:** Teacher recommendation ONLY

## SCIENCE

### **400 Integrated Science**

### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 09**

This course is an introductory level course designed to give 9th grade students a background in the major branches of science. This course will introduce topics to students that they will learn in more detail throughout their high school careers. An “integrated science” course serves the purpose of a “general science” course covering the inquiry of science, earth science, chemistry and life sciences.

### **412 Biology**

### **REQUIRED CLASS**

◆  **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 10**

CP Biology is designed to give students experience in exploring and examining core concepts in biological science. These core concepts include scientific process, biochemistry, cell biology, genetics, evolution, ecology and life forms. Laboratory activities are an important part of the biological science experience. In addition to core concepts, CP Biology develops skills required for a successful transition to college-level course work. These skills include writing, critical thinking, organization and independent study skills.

### **413 Advanced Biology (Pre-AP)**

### **REQUIRED CLASS**

◆  **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 09**

Pre-AP Biology focuses deeply on the concepts and skills that have maximum value for college and career. This course concentrates on the core areas of ecological systems, cellular systems, evolution and genetics. Rather than understanding content topics in isolation, students will make meaningful connections between the structures, processes and interactions that exist across biological systems—from cells to ecological communities.

**Prerequisite:** Proficiency on Grade 8 PSSA Science exam, teacher recommendation and final grade 8 science grade

### **420 Chemistry**

### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 10-12**

In this first year Chemistry course you will investigate the atom, electrons, energy, matter, mass relationships and chemical bonding. Some of the basic concepts explored in Chemistry will include atomic theory, periodic properties of the elements, stoichiometry, bonding theory and molecular geometries, types of chemical and physical changes, gases and thermodynamics. There will be a laboratory component of the course, as well.

**Prerequisite:** Completion of Algebra I with a minimum grade of 80 percent and teacher recommendation

### **421 Advanced Chemistry (Pre-AP)**

### **REQUIRED CLASS**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 10-12**

This is an advanced first-year chemistry course that will cover all of the material of the Introductory Chemistry Course, as well as incorporating several advanced topics from the Advanced Placement Chemistry course. An emphasis will be placed

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on depth of study, and the course will include several AP level laboratory experiments. Topics to be covered will include statistical treatment of data, identification of chemical compounds, writing and balancing chemical equations, the mole concept and stoichiometry, solutions, acid—base reactions, oxidation—reduction reactions, gases and thermochemistry. This course is intended for students considering careers in science or medicine, with an expectation that students completing the course will continue with the Advanced Placement Chemistry course during the 11th grade year.

**Prerequisite:** Completion of Algebra I and Biology with a minimum grade of 80 percent and teacher recommendation

## 422 Microbiology

## REQUIRED CLASS/ELECTIVE

◆ Group CP All year — 6 days Credit 1.0 Grade 12

Microbiology is a course designed to explore the many aspects of bacteriology (bacteria), virology (viruses) and mycology (fungi). Core concepts covered will include structure, function and classification of microbial organisms along with proper aseptic technique, isolation, serial dilution, plating and culturing. Food microbiology and Clinical aspects such as infectious diseases and treatments where students will learn about the modes of action of common antibiotics against different types of bacteria will be covered in this course. As in all science classes, laboratory activities will play an important part of this experience.

**Prerequisite:** Completion of Biology AND Chemistry with a minimum grade of 80 percent AND pass the Biology Keystones and teacher recommendation. A 70 percent or better in AP Biology is recommended.

## 434 Wildlife of Pennsylvania

## REQUIRED CLASS/ELECTIVE

Group CP All year — 6 days Credit 1.0 Grade 12

Students will explore Pennsylvania's biodiversity and will become familiar with any of the game and non-game animals found in our region. Ecology, wildlife management, outdoor recreation and wildlife careers will be a focus of the course work, as well as animal behavioral studies, aquatic ecosystems, terrestrial ecosystems and conservation. Students will learn about tools and techniques used by wildlife professionals.

**Prerequisite:** Biology

## 436 Anatomy and Physiology

## REQUIRED CLASS/ELECTIVE

◆ Group CP All year — 6 days Credit 1.0 Grades 11-12

This course is designed to give students an in-depth understanding of the human body with emphasis on its structure and function. This is a fundamental course for students interested in health-related careers, but also serves to increase our understanding of medical terminology and concepts necessary to deal with a technological and changing world. There will be some selected and limited lab work, including dissections of the eye, fetal pig, heart and lungs. Topics will include tissues, integumentary, skeletal, muscular, nervous, senses, endocrine systems, cardiovascular respiratory, digestive, urinary and reproductive systems.

**Prerequisite:** Biology

## 437 Exploring the Physical Sciences

## REQUIRED CLASS/ELECTIVE

◆ Group A All year — 6 days Credit 1.0 Grades 11-12

This course is intended as an introduction to the physical sciences. Fundamentals of chemistry, physics, electricity, engineering, mechanics and laboratory techniques will be illustrated using a "hands-on" approach that will combine theory

with instrumentation and experimentation. In addition, vocational opportunities and practical applications of the physical sciences will be highlighted. The course will include 1 or 2 days per week of laboratory experiments.

#### **439 Physics**

#### **REQUIRED CLASS/ELECTIVE**

♦ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 10-12**

This program of studies in physics should provide you with an introduction to the field of physics. You will be presented with the basic physical laws and procedures by which they are established. You will have an opportunity to gain experience in application of scientific methods of investigation as used in physics. You will be exposed to the concepts of mechanics, matter and energy, wave motion, electricity and magnetism, electronic, atomic physics, and nuclear physics.

#### **441 Advanced Placement Physics 1**

#### **REQUIRED CLASS/ELECTIVE**

♦ **Group AP**                      **All year — 9 periods**                      **Credit 1.50**                      **Grades 10-12**

AP Physics 1 will start with introductory physics skills and will progress into the study of straight line motion, force, energy, rotational motion, momentum, and electrostatics. AP Physics 1 is highly recommended for students planning to enter the life sciences, pre-medicine, or engineering fields. Students may be eligible to receive college credit for physics, based on the rules of their selected college. It is recommended, but not required, that students take CP Physics prior to AP Physics 1.

**Prerequisite:** Algebra

#### **442 Advanced Placement Biology**

#### **REQUIRED CLASS/ELECTIVE**

♦ **Group AP**                      **All year — 9 periods**                      **Credit 1.50**                      **Grades 10-12**

The AP Biology curriculum parallels an introductory college biology course, placing emphasis on the eight core AP Biology themes and the twelve AP labs. Main areas of focus include: molecules, cells genetics, evolution, organisms and populations. Completion of formal lab write-ups will be expected, as well as summer reading of *Origin of Species*, by Charles Darwin. Text for the course is college level and supplements in class lectures. Students completing the course may elect to take the AP Biology Exam.

**Prerequisite:** A minimum of 80 percent in Biology & Chemistry, proficient or advanced in Biology Keystone and teacher recommendation

#### **443 Advanced Placement Chemistry**

#### **REQUIRED CLASS/ELECTIVE**

♦ **Group AP**                      **All year — 9 periods**                      **Credit 1.50**                      **Grades 11-12**

The Advanced Placement course is equivalent to two semesters of college chemistry at the science, engineering, or pre-medicine major level. Students will be expected to maintain a rigorous pace that will require a great deal of independent study, reading of the text and supplemental materials and high-level problem solving. Students will follow a college-style format consisting of weekly quizzes, multi-chapter exams and comprehensive mid-term and final exams. Topics covered will include chemical reactions, stoichiometry, gases, thermochemistry, atomic and bonding theories, liquids, solids, solution chemistry, kinetics, equilibrium, acids and bases, reaction spontaneity, electrochemistry, nuclear chemistry and organic chemistry. A laboratory component is also included which will require written laboratory reports. All students taking the course will be required to take the AP Chemistry Examination.

**Prerequisite:** CP Chemistry and teacher recommendation

**446 Environmental Science****REQUIRED CLASS/ELECTIVE**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 12**

In this course, students will examine topics in Environmental Science & Ecology. Course content will include current issues in environmental science, population ecology, pollution in ecosystems and local ecology in our region. This course is designed for any 12th grade student with fewer than three science credits or for any 12th grade student seeking an elective credit.

**Prerequisite:** Teacher recommendation

**447 Advanced Placement Physics 2****REQUIRED CLASS/ELECTIVE**

◆ **Group AP**                      **All year — 9 periods**                      **Credit 1.50**                      **Grades 11-12**

AP Physics 2 is the continuation of AP Physics 1. Topics covered in AP Physics 2 include, thermodynamics, electric fields, electrical energy, current and resistors, magnetism, light, and atomic physics. AP Physics 2 is highly recommended for students planning to enter the life sciences, pre-medicine or engineering fields. Students may be eligible to receive college credit for physics, based on the rules of their selected college.

**Prerequisite:** AP Physics 1

**448 Conservation Science****REQUIRED CLASS/ELECTIVE**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grade 12**

Conservation Science is an interdisciplinary class incorporating conservation biology with broader social and natural systems. The class focuses on topics and issues addressed by the state Department on Conservation and Natural Resources - working landscapes, rebuilding public support, and examining human relations with natural systems. The class will often be working outdoors in all weather conditions.

**Prerequisite:** Teacher recommendation

## **WORLD LANGUAGES**

**510 Spanish I****ELECTIVE**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 09-12**

The Level I Spanish course is an introduction to the language with emphasis on building vocabulary and learning basic grammar rules. Written, oral, listening and reading exercises are combined to reinforce these basic skills. This course also gives the student a foundation through which to study the geography and cultures of Spanish speaking areas of the world.

**514 Spanish II****ELECTIVE**

◆ **Group CP**                      **All year — 6 days**                      **Credit 1.0**                      **Grades 10-12**

The Level II Spanish course focuses on understanding and speaking the target language. Increased emphasis is placed on the development of more complex grammar and writing skills. Language structures introduced in the first level are reviewed. Exposure to and appreciation of the target language is acquired through the presentation of authentic reading materials.

**Prerequisite:** Language Level I with a grade of “C” or better and teacher recommendation.

### 515 Spanish III

**ELECTIVE**

◆ Group CP All year – 6 days Credit 1.0 Grades 11-12

The Level III Spanish course consists of advanced study of grammatical concepts such as the use of multiple verb tenses. Cultural topics such as history, current events and literature are introduced in the target language. Students are expected to communicate in the target language.

**Prerequisite:** Language Level II with a grade of “C” or better and teacher recommendation

### 560 Spanish IV

**ELECTIVE**

◆ Group CP All year – 6 days Credit 1.0 Grades 12

The Level IV Spanish course consists of an intensive study of all points of the language and culture, which are developed through conversations, compositions and the study of history and literature. Sophisticated writing and speaking skills will be emphasized with authentic materials in the classroom as well as with research projects. Students are expected to communicate exclusively in the target language. Minimal direction will be provided in English.

**Prerequisite:** Language Level III with a grade of “B” or higher teacher recommendation

### 520 French I

**ELECTIVE**

◆ Group CP All year – 6 days Credit 1.0 Grades 09-12

The Level I French course is an introduction to the language with emphasis on building vocabulary and learning basic grammar rules. Written, oral, listening and reading exercises are combined to reinforce these skills. This course also provides the student with a foundation through which to study the geography and cultures of the French speaking areas of the world.

### 524 French II

**ELECTIVE**

◆ Group CP All year – 6 days Credit 1.0 Grades 10-12

The Level II French course focuses on understanding and speaking the target language. Increased emphasis is placed on the development of more complex grammar and writing skills. Language structures introduced in the first level are reviewed. Exposure to and appreciation of the target language is acquired through the presentation of authentic reading materials.

**Prerequisite:** Language Level I with a grade of “C” or better and teacher recommendation

### 525 French III

**ELECTIVE**

◆ Group CP All year – 6 days Credit 1.0 Grades 11-12

The Level III French course consists of advanced study of grammatical concepts such as the use of multiple verb tenses. Cultural topics include history, current events and literature in the francophone world. Students are expected to communicate in the target language as often as possible in the classroom.

**Prerequisite:** Language Level II with a grade of “C” or better and teacher recommendation

**563 French IV**

**ELECTIVE**

◆ **Group CP** **All year — 6 days** **Credit 1.0** **Grade 12**

The Level IV French course consists of an intensive study of all points of the language and culture, which are developed through conversations, compositions and the study of history and literature. Sophisticated writing and speaking skills will be emphasized with authentic materials in the classroom as well as with research projects. The goal for students is to communicate primarily in the target language.

**Prerequisite:** Language Level III with a grade of “B” or higher and teacher recommendation.

## **INFORMATIONAL SCIENCES**

**605 Internet & Social Media**

**ELECTIVE**

**Group CP** **Semester (first)— 6 days** **Credit 0.50** **Grades 09-12**

This course reflects on how emerging technologies will empower society to do more with the Internet. We will cover core Internet technologies, Web page design, authoring, computational thinking, networking fundamentals and technology planning. The social media aspect of this course can help students become media literate and teach collaboration, communication and the critical-thinking skills needed for future success in this technological age. In this course, you will learn how to use social media applications and be prepared to journey safely through citizenship.

**606 Web Page & Mobile Apps**

**ELECTIVE**

**Group CP** **Semester (Second) — 6 days** **Credit 0.50** **Grades 09-12**

This course covers various aspects of Web design using forms, cascading style sheets, DOM and java scripting. The design portion also focuses on the elements and the processes of combining text, graphics and/or multimedia for page-layout designs. Students will be using various applications and software packages to design and develop quality online documents and applications. Using Android phones, students will learn to design and create useful and fun phone applications.

**636 Multimedia Production for Social Media**

**ELECTIVE**

**Group CP** **All year — 6 days** **Credit 1.0** **Grades 10-12**

This course covers topics that utilize contemporary methods for digitally designing multimedia. Students will learn how to digitally create multimedia and prepare it for various end products. Students will have the opportunity to apply and demonstrate proficiency in concepts learned in class by engaging in projects and activities assigned to give them experience using various forms of media to solve real-world problems. Each student will exit the course with an interactive digital portfolio of his or her work.

**666 Game Programming****ELECTIVE****Group CP****All year — 6 days****Credit 1.0****Grades 10-12**

This course explores the concepts of Java and Media Computation with an emphasis on object-oriented programming (OOP) and design. This course will cover topics typically found in a first semester college computer programming course. Students will learn how to problem solve and to create software using the Java programming language. Course content is focused on learning the logic structures universal to most all programming languages: loops, if statements, arrays, etc. Other topics include program design and implementation, algorithm analysis and object-oriented programming design. This course is intended to serve both as an introductory course for computer science majors and for students who will major in disciplines that require significant involvement with computing.

**667 Animation and Visual Effects****ELECTIVE****Group CP****Semester (*first*) — 6 days****Credit 0.50****Grades 10-12**

Students in the animation and visual effects class will combine artistic vision and technical skills to transform their wildest imaginations into moving images on the screen. This course includes 2D, 3D, stop-motion animation, visual effects for movies and motion graphics.

**668 Digital Imaging Production****ELECTIVE****Group CP****Semester (*second*) — 6 days****Credit 0.50****Grades 10-12**

In this course, students master techniques to enhance digital images and add a professional polish to their work. This course offers step-by-step instructions for basics like cropping, rotating and resizing images. Students will also experiment with Photoshop's tools for correcting exposure, adjusting color and color casts, as well as working with Adobe powerful layer and selection tools. Students will learn to add text, retouch and even clone away unwanted elements from images. They will also see how to work with raw images and prepare images for print or online use.

**670 Programming for the Arduino****ELECTIVE****Group CP****All year — 6 days****Credit 1.0****Grades 11-12**

This course provides students with fundamental knowledge of computer programming for solving applied and electronics-related problems. Students learn how a computer works through structured programming and software development while interfacing electronics and sensors using Arduino controllers. The topics include programming constructs, data types and declaration of variables, expressions and operators, selection statements, repetition, flowcharts for algorithm development, functions for modular programming, arrays for statistical data analysis, plotting for visualizing data, processing data files and robotics applications. Students learn how to program Arduino with a user-friendly programming language and Arduino IDE. Students also learn the basics of electronics and how Arduino responds to sensors using enlightening examples. Then, students design and build more fun prototypes based on their imagination.

## **SCIENCE, TECHNOLOGY, ENGINEERING, and MATH (STEM)**

### **710 Principles of Design ELECTIVE**

**Group CP All year — 3 days Credit 0.5 Grades 09-10**

In this course, students will learn the fundamentals of design and apply solutions to real world projects. Students will develop problem solving skills in research and design using creative skills to solve problems. Working individually and in small groups, students will be challenged to design, model, analyze, modify and communicate their solutions. Students will work from concept to final production using graphics and visual technologies.

### **720 Graphics ELECTIVE**

**Group CP All year — 6 days Credit 1.0 Grades 09-12**

This course is designed for students to develop an understanding for a variety of graphic arts forms used to convey ideas to others, while introducing them to a variety of processes associated with graphics. Students will explore computer layout fundamentals, laser engraving, screen printing and utilization of the design process. Projects will include screen printing, digital print media, digital photography and vinyl graphics applications.

### **721 Introduction to STEM ELECTIVE**

**Group CP All year — 3 days Credit 0.5 Grades 09-12**

Introduction to STEM is designed as a basic overview for careers associated with Science, Technology, Engineering and Math. Students who complete this course will gain exposure to areas necessary to design and develop the concepts needed to be successful in today's technological society. Exciting hands-on learning activities build skills for success through research, experiments and challenges that incorporate STEM concepts. Activities are designed around problem solving with an emphasis on engineering systems thinking that help solve practical problems for society.

### **722 Agricultural Science ELECTIVE**

**Group CP All year — 3 days Credit 0.5 Grades 10-12**

Agricultural Science will expose students to the study of animal science and career options related to the ever changing and exciting world of agriculture. Students will have experiences in various animal science concepts with exciting hands-on activities, projects and problems. Students' experiences will involve the study of animal anatomy, physiology behavior, nutrition, reproduction, health selection and marketing.

### **723 Introduction to Biotechnology ELECTIVE**

**Group CP All year — 3 days Credit 0.5 Grades 10-12**

Introduction to Biotechnology provides a broad overview of bio-related technologies as it relates to industry and the consumer. Agriscience and how it is addressing the impact of a growing population on a limited food supply will be discussed, as well as the medical applications of scientific advancements in biopharmaceuticals. Students will explore topics such as genetically modified organisms, plant science, ecology and DNA. The greenhouse will be utilized to give students an extended classroom to develop various laboratory and research activities throughout the year

**725 Introduction to Automation****ELECTIVE****Group CP****Semester (1<sup>st</sup>) – 6 days****Credit 0.5****Grades 10-12**

This course will introduce students to various properties of engineering materials and material processes in how they apply to modern manufacturing. High in demand, careers or internships are easily available for senior year students and graduates with interest in the field. The utilization of computer aided drafting (CAD) and development of machine code for computer numeric control (CNC) machines will be the focus of the course. Students can enroll in Advanced Manufacturing Semester Two.

**Prerequisite:** CAD 2D & 3D**726 Competitive Robotics****ELECTIVE****Group CP****All year – 6 days****Credit 1.0****Grades 11-12**

This course provides a yearlong exploration in career development in manufacturing and teamwork. Students will work in teams to develop a working battle robot that will compete against area schools in the BotsIQ combat robot competition. Students are responsible for the overall design and fabrication of the robot, as well as developing the required documentation to accompany the robot for the competitions. Students will reinforce CAD, design, electronic and machining skills to develop and revise the 15-pound battle robot. More information can be found on [www.botsiqpa.org](http://www.botsiqpa.org).

**Prerequisite:** CAD 2D & 3D; and **Corequisite:** Introduction to Automation**727 Structural Engineering****ELECTIVE****Group CP****All year – 3 days****Credit 0.5****Grades 09-12**

Structural engineering will study the practical application of materials to solve engineering problems. A mixture of demonstrations, virtual simulation and hands-on building will allow for practical application of knowledge. This course will be a competition-style environment where students will utilize the engineering design process to construct solutions to various design challenges. Working individually and in groups, students should be prepared to spend days working on projects and have them destroyed in the name of testing and data collection, not to mention bragging rights for the best performing projects.

**730 Robotics Engineering****ELECTIVE****Group CP****All year – 6 days****Credit 1.0****Grades 10-12**

This course will provide students an introduction to the widely growing robotic industry. Students will begin learning simple coding strategies with NXT graphic-based programming. Afterwards, students will learn and utilize the VEX-Robot C-programming language and apply this content by developing program solutions to challenges in the robotics field. Students in this course will use autonomous and remote controlled robots to develop solutions using a variety of sensors and applications. Programming language will progressively build throughout the course.

**731 Electricity/Electronics****ELECTIVE****Group CP****Semester (1<sup>st</sup>) – 6 days****Credit 0.5****Grades 09-12**

This course will give a basic understanding of electricity and home circuitry. Concepts utilized will be Ohm's Law, electrical safety, wiring, series and parallel circuits and how they relate to electrical devices. Students will build, test and analyze

circuits commonly found in society. Skills will include schematic reading, board soldering and circuit prototyping. Students can continue expanding their understanding of electricity with Energy & Power Systems during Semester Two.

### **735 Energy & Power Systems**

**ELECTIVE**

Group CP

Semester **(2nd)** – 6 days

Credit 0.5

Grades 09-12

This course will give an introduction to the various forms of energy that power our world and the technology we use. Those energy forms will be applied to the transportation industry. Students will participate in laboratory and research-based applications. Forms of energy conversion and mechanical advantage will be discussed, as well as the physical and mathematical properties involved. This semester course is a continuation of the principles learned in Electricity/Electronics.

### **737 Drones & Avionics**

**ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 11-12

Drones & Avionics is an exciting opportunity for students to immerse themselves in a hands-on learning opportunity where the sky is no longer the limit. Students will learn and utilize the Tello Drone System, which offers a variety of functions such as HD cameras and video, pre-programmed flight and sightless flight capabilities. Students will be challenged to complete various projects using drones to replicate real world scenarios. Students will also have the opportunity to take the FAA Part 107 certification test and earn their commercial drone operators license.

**Prerequisite:** Earning a C or better in two (2) of the following: STEM, Robotics Engineering, Robotics NXT, Robotics VEX, Game Programming, or Programming for the Arduino

### **739 Advanced Manufacturing**

**ELECTIVE**

Group CP

Semester **(2nd)** – 6 days

Credit 0.5

Grades 10-12

Students will form a classroom-based company that will develop a product from design, production and marketing. Students will assume leadership positions within the company and research and develop prototypes to decide on a final product. Next, students will develop a production analysis and process materials through traditional machine operations as well as CNC and graphic operations. Finally, students will market their product through advertising and complete a cost analysis reflecting costs, profits and losses. This second level course builds on the skills learned in Introduction to Automation.

**Prerequisite:** Introduction to Automation

### **740 Commercial Graphic Design**

**ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grades 10-12

This advanced graphics course is designed to give each student an exciting and rewarding foundational experience in the field of graphics. Through a hands-on approach, students will expand on earlier learned design skills pivoting around the elements and principles of design. The application of these techniques will allow each student to become a part of the media footprint for the Southmoreland School District. Students will complete projects while developing their skills that meet the needs of our school. During this process, students will develop soft skills that will equip them for future success in this and any other profession. An interest in technology and a willingness to take creative risks are attributes that will lead to success in this class. Completed projects will be used by various departments, clubs and organizations throughout our school and community. ***This course may be repeated for credit.***

**Prerequisite:** Graphics

**751 CAD 2D AutoCAD****ELECTIVE**

Group CP

Semester *(1st)* – 6 days

Credit 0.5

Grades 09-12

This course will provide an introduction to computer aided drafting through the use of AutoCAD two- dimensional software. Students will apply and reinforce Geometric terminology as well as interpreting technical illustrations to enhance their competency of AutoCAD and computer based skills. Students will focus on accuracy of drawings, presentation, and analyzing dimensions and annotations to understand technical illustrations used in a variety of industry settings. AutoCAD software is available for students to use on their own personal computer and it is strongly encouraged! Students can continue the second semester with CAD3D Inventor.

**752 CAD 3D Inventor****ELECTIVE**

Group CP

Semester *(2nd)* – 6 days

Credit 0.5

Grades 09-12

This course will reinforce geometric language used from CAD 2D and introduce three-dimensional modeling through Inventor software. Students will develop three-dimensional models and present using orthographic projection while reinforcing dimensioning and annotative skills acquired in CAD 2D. Exported models can be 3D printed or assembled into models showing multiple parts. Inventor software is available for students to use on their own personal computer and it is strongly encouraged!

**Prerequisite:** CAD 2D**754 Graphics Prototyping****ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grades 10-12

This course offers a hands-on learning experience for students who would like to design, create, prototype, and manufacture their own projects. Students will have access to STEM equipment and resources to engage in activities to create projects which teach them how to control the machines and gain basic skills in 3D printing, laser cutting and engraving and use the software necessary for these operations. Students will have the opportunity to design and create their own projects based on their areas of interest, and/or solutions to real-world problems. Graphics Prototyping is offered as either a 6-day or 3-day option.

**755.3 Life After High School****ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 11-12

This course will focus on the skills needed to be successful after your time at Southmoreland. Students will complete curriculum units such as resume writing and interviewing, car and home ownership, personal finance and debt management. We will also look at all post secondary education options, such as: technical, associate, bachelor's and graduate-level education. Content will be presented alongside role-playing scenarios designed to mimic experiences students will have on their journey to success.

**765.3 Internship Option: Life After High School****ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 11-12

As a second component to the course, students will be responsible for completing 50 hours of an internship of their choice. The internship will be self-paced with content offered via the Google Classroom. Students must meet certain deadlines

throughout the year with regards to specific assignments and time requirements. Student provided transportation is preferred, but not required. The internship phase will have students going to local places of work that are within their selected career pathway. An internship portfolio and final presentation will allow students to demonstrate what they learned and apply that knowledge to their career selections upon graduation. All students choosing the option must complete the internship and capstone presentation by May 1. Upon successful completion, students will be awarded the half-credit for their work.

## **FINE ARTS**

### **805 Art I – Foundations of Studio Art**

**ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 09-12

This is a full year, comprehensive-foundation course designed to meet the needs of those students who want to broaden their general education by increasing their understanding and appreciation of the visual arts, strengthen their artistic/self-expression skills and satisfy the prerequisite nature of this course so as to be able to take any further art course offerings during their high school career. Students will explore the world of art in this introductory course in the fundamental art elements and principles. Projects will emphasize the use of various media and techniques to create original fine art and encourage creative thinking and problem solving. Art appreciation/art history content will also be included in the curriculum for the course.

### **811 Art II – Discover Refined Art Studio**

**ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grades 10-12

This course expands the student's knowledge from Art I through the use of more professional art materials and processes. This course is geared toward the student who would like to enhance their art skills and gain more experience with this wider range of art materials and processes. Students will be applying their knowledge of the art elements and principles to projects emphasizing drawing, painting, ceramics, commercial art, sculpture, jewelry printmaking and crafts. Using traditional and non-traditional materials, students develop inventive experimental approaches to a variety of two-dimensional media and examine how media, ideas and composition relate. Students explore the boundaries between painting and sculpture when non-traditional materials are incorporated in collage form. Students will be expected to revisit and utilize their knowledge acquired in Art I in order to complete class projects and participate in classroom discussions.

**Prerequisite:** Art I

### **814 Art Applications – Advanced Studio Arts**

**ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grades 11-12

This course provides a choice for the student's specific interests and provides the opportunity for students to explore media in a much more advanced manner. The course is designed specifically for students who have a strong interest in the arts and have acquired many art skills prior to the course. During the first semester, each student will choose a two-dimensional medium in which they would like to focus. They may choose from drawing, painting, printmaking and commercial art in which they will create projects using all and any materials related to that particular medium they have chosen to work in. During the second semester, each student will choose a three-dimensional medium in which they would like to focus. They may choose from sculpture, ceramics, jewelry and crafts. The goal of this course is to give students the opportunity to

improve their skills through the use of more specific materials/mediums, direct instruction and exposure to advanced methods and media.

**Prerequisite:** Art I and II

**814.3 Art Applications – Advanced Studio Arts**

**ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 11-12

**Prerequisite:** Art I and II

**834 Senior Studio**

**ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grade 12

This course is designed specifically for students who intend to continue their art education at the collegiate level. This is a full-year, one credit course developed to enhance and expand the experience of the serious-minded art student. This course will allow the art student to explore new techniques and follow creative and innovative ideas. Throughout this course, students will complete projects in two- and three-dimensional mediums in order to compile a professional art portfolio of their work to be shown to universities, employers, etc. Careers in art, portfolio composition and choosing a school to continue their education will be discussed throughout the course. In addition to fine art projects, students will also be required to maintain a sketchbook and exhibit their work in a formal fashion at the conclusion of the spring semester.

**Prerequisite:** Art I and Art II or at discretion of instructor

**865 Symphonic Band**

**ELECTIVE**

Group CP

All year – 6 days

Credit 1.0

Grades 09-12

The purpose of this course is to allow students the opportunity to rehearse and perform band music of all styles and periods. Rigorous coursework includes study of musical technique on an individual level, various advanced time signatures and styles and performing in a developing group setting. The finer points of music are taught through accompanying lessons and group rehearsals. School and public performances are required. Students are encouraged to take the 6-day course section.

**Prerequisite:** Prior participation in concert band or director's recommendation

**865.3 Symphonic Band**

**ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 09-12

**868 Instrumental Music Lab**

**ELECTIVE**

Group CP

All year – 3 days

Credit 0.5

Grades 09-12

The course is open to students that are interested in learning to play an instrument that are **not enrolled** in another instrumental course at Southmoreland High School. The focus of the course is to introduce students to instrumental technique and music notation through individual and small group study. Students are encouraged to provide their own instrument; however, with director consent there may be a limited supply for usage at the school. Course material will include basic to intermediate theory as needed, performance skills on an instrument, aural training and overall musicianship. This course has limited seating.

**Prerequisite:** Director approval

**870 Concert Chorale****ELECTIVE****Group A****All year – 6 days****Credit 1.0****Grades 09-12**

This ensemble performs mixed choral literature from an intermediate to advanced level. Students will participate in activities designed to further develop their vocal technique, musicianship and performance skills. Participation in rehearsals and performances beyond regular school hours is required.

**Prerequisite:** Participation in Scottie Singers or director's consent.

**870.3 Scottie Singers****ELECTIVE****Group A****All year – 3 days****Credit 0.5****Grades 09-12**

This course provides opportunities for students to develop their musical potential through singing in the choral ensemble. This group performs literature from a beginning to intermediate level. Students will be trained in the proper use of the voice, posture, music reading skills and basic movement. Participation in rehearsals and performances beyond regular school hours is required.

**872.3 Beginning Music Theory****ELECTIVE****Group CP****Semester (1st) – 6 days****Credit 0.5****Grades 10-12**

The purpose of this course is to learn the basics of music theory. The course is geared to the beginning and intermediate musician. The focus of this course will be beginning theory, basic musical analysis, basic aural training and music history. This class is open to all students.

**873.3 Advanced Music Theory****ELECTIVE****Group CP****Semester (2nd) – 6 days****Credit 0.5****Grades 10-12**

The purpose of this course is to expand upon theory skills gained in Beginning Theory. The course is geared toward the advancing musician with a serious interest in music and music theory. Course material will include advanced theory, basic musical analysis, aural training and some music technology. This class is open to all students that meet the prerequisite. If you plan to take AP Music Theory it is requested that you consider taking music theory in a two year sequence (Beginning Theory and Advanced Theory as a sophomore or junior is recommended).

**Prerequisite:** Completion of Beginning Music Theory with a minimum of a "B" average.

**876.3 Musical Arts 101****ELECTIVE****Group A****All year – 3 days****Credit 0.5****Grades 10-12**

Explore the fundamental concepts in vocal music, drama, movement and performance in the theatre industry. Through interpretive movement, monologues and song, students will have the opportunity to add their personal flair to theatrical prompts. Students will be asked to participate in class performance assignments and with classmates as part of the Spring chorus concert. In this performance-based class, you will also learn how the professionals behind the scenes of theatrical productions make the performance possible: directors, choreographers, producers, set designers, lyricists, hair & make-up designers and costume designers.

**877.3 Musical Arts 102****ELECTIVE****Group A****All year — 3 days****Credit 0.5****Grades 11-12**

This course builds on Musical Arts 101, as students continue to broaden their exposure to the inner workings of the world of theater. Students will continue to expand on the foundation of vocals, drama and movement. The class will study “who’s who” in the business such as: directors, choreographers, producers, set designers, lyricists, hair & make-up designers and costume designers, and examine how their roles are vital to pulling together a musical performance. This is a performance-based class. Students will be asked to participate in class performance assignments and with classmates as part of the Spring chorus concert.

**879 Advanced Musical Arts****ELECTIVE****Group CP****All year — 6 days****Credit 1.0****Grades 11-12**

This advanced class will utilize the concepts acquired in Musical Arts I and II. Students will explore college level monologues and scenes. Students will complete all facets of a professional portfolio. Attention will be paid to the audition process and preparation. This is a performance based class. School and public performances are required.

**Prerequisite:** Musical Arts 101 or 102

**880 Advanced Placement Music Theory****ELECTIVE****Group AP****All year — 6 days****Credit 1.0****Grades 10-12**

The purpose of this course is to expand and hone theory skills beyond those gained in Beginning Theory. Students will develop the skills and have the opportunity to take the AP Music Theory test. The course is geared toward the advancing musician with a serious interest in music and music theory. Students interested in pursuing a career in music are recommended to take this course. Course material will include advanced theory, aural training, part writing, composition, music technology and comprehensive music analysis. This class is open to upperclassmen, but it cannot be taken for more than one year.

**Prerequisite:** Recommendation of the Music Department, completion of Music Theory with an 80 or better.

**881 Advanced Musicianship****ELECTIVE****Group CP****All year — 6 days****Credit 1.0****Grades 11-12**

The purpose of this course is to enhance the overall musicianship of the experienced upperclassmen\_instrumentalist. The course is geared toward the advancing musician with a serious interest in music or future career in the field of music. Students will need to provide their own instrument. Course material will include advanced theory, musical analysis, performance skills, music history, aural training and overall musicianship. Students will be given individual and small group lessons and performance opportunities. This class is open to upperclassmen but cannot be taken for more than two years total.

**Prerequisite:** Director’s consent & completion of Advanced Music Theory with a 80 or better.

**882.3 Percussion Methods****ELECTIVE****Group CP****All year — 3 days****Credit 0.5****Grades 09-12**

Students will study fundamental technique on a variety of percussion instruments. The students will have the opportunity to learn through individual lessons, small group and ensemble settings. The class is open to students of all abilities and

experience levels with the objective of building an ensemble and performing as an independent group, as well as, a subset of the concert band. The class is limited in size with priority given to existing percussionists and new students that hope to perform as percussionists in the Southmoreland music program.

## **HEALTH & PHYSICAL EDUCATION**

### **900 Physical Education 4 Life**

Group A

All year — 3 days

Credit 0.5

Grades 10-12

As a student of physical education, you will be offered a program in grades 10 through 12 that will serve as an integral portion of your total education. The program of study for grades 10, 11, 12 will be structured to provide a range of experiences in physical education.

### **930 Physical Education I/Health**

Group A

All year — 3 days

Credit 0.5

Grades 09

The physical education experience and health course will be combined to provide students with physical activity and education in health topics such as human body structures and functions, drug effects with emphasis on alcohol and tobacco.

*Students attending CWCTC will be required to take Wellness (10-12) at the CWCTC to fulfill SHS physical education requirements.*

## **EDUCATION**

### **960 Social Foundations for Education**

Group CP

All year — 6 days

Credit 1.0

Grades 11-12

Students in this course have the opportunity to develop a foundational understanding of the dynamics of schooling in society by addressing the cultural aspects that underlies society's educational ideas and practices. Through an interdisciplinary approach, readings and activities are designed for school practitioners, or those contemplating careers in education, to engage in the study of those cultural aspects and consequences. The general intent of foundational study is to introduce students to interpretive uses of knowledge germane to education and to establish a basis of lifelong learning through normative and critical reflection on education within its historical philosophical, cultural and social contexts. Special emphasis is focused on the role of schooling in cultivating the habits necessary for demographic citizenship which includes ongoing efforts to secure equitable and just social relations, and to advance the common good.

**Note:** *The course is offered through a partnership with the University of Pittsburgh at Greensburg. Students are able to earn college credits through UPG.*



Central Westmoreland Career & Technology Center offers vocational skill training and academic course work for secondary students from 10 sending districts. Upon completion of their program of study, secondary students enter the workforce or continue onto a postsecondary institution. CWCTC is committed to helping all students become lifelong learners to keep pace with the changes in technology which will permit them to remain competitive in a highly complex work environment and to contribute to our region's economic growth. The CWCTC offers 19 Programs with opportunities to earn industry certifications/credentials and articulated credits for higher education. See [www.cwctc.org](http://www.cwctc.org) for more information. More information about qualifying for advanced credits is available at SOAR (Student Occupationally and Academically Ready.)

## Technical Courses (Grades 10-12)

**Agriculture & Landscape Design (990)** - *Do you enjoy working outdoors and in nature? Would you like to design and maintain outdoor spaces? Explore caring for animals with our small farm family members.* This program is a specialized curriculum designed to prepare students to be desirable employees of architects, landscapers, nurseries, greenhouses, florists or various other landscape businesses. Both maintenance and establishment of lawns, as well as, landscaping homes and businesses are included in the curriculum. Caring for small farm animals. The principles of design are also included along with plant identification, budgeting, and cultivation procedures. Certification opportunities; PA Pesticides, ICPI, NCMA, Versa Lock Basic Training.

**Aspiring Educators (981)** - *Have you considered a career in education?* **Available to rising juniors and seniors,** the Aspiring Educators Program combines theory work, led by a master teacher with interactive field experiences. The Program will work with teacher preparation programs at nearby colleges and universities. Successful completion of the Program will afford students articulation and dual enrollment opportunities at no additional cost. The Aspiring Educators Program is a collaborative initiative between the CWCTC and Mount Pleasant Area School District. The Program will operate out of Mount Pleasant Area Junior/Senior High School for half of the academic day. All core classes are still delivered at the sending LEA. Student drivers are permitted. *\*See your school counselor for additional information with the application process. Limited seats available.*

**Automotive Collision Technology (986)** - *Have you always wanted to restore or repair a classic car or paint a hot rod?* Automotive Collision students will learn the skills needed to repair, reconstruct, and finish damaged vehicle bodies, and external features. In a garage setting, students will learn maintenance and safety standards of the automobile industry. They will have the opportunity to work with frame straightening equipment, complete car panel replacement, and work in a spray booth, which includes state-of-the-art water-based technology. Students will also practice customer service skills and estimate the cost of vehicle repairs. Certification opportunities: SP2 & OSHA 10.

**Automotive Mechanics Technology (972)** - *Do you have an interest in cars and trucks? Are you mechanically curious and like to troubleshoot technical problems?* Students who choose this program will be prepared to work with the latest technology that will provide them with the skills needed to repair, service, and maintain automobile systems and their components. Students will receive instruction in brake systems, electrical systems, fuel systems, engine performance and repair, suspension and steering, and air conditioning. Critical thinking skills will be employed and strengthened through the diagnosis and repair of current model vehicles. System training simulators are utilized and students will learn the procedures for State Inspection and Emissions. Certification opportunities; ASE, PA State Safety Inspection & Emissions, SP2 Safety/Pollution, A4, Lifting it Right, EPA609 Refrigerant.

**Computer Information Science (997)** - *Do you consider yourself a novice coder? Are you curious about how videogames are designed and built? Discover what happens in the background.* Students in the Computer Information Science classroom will be instructed in various programming languages. Students will gain an understanding of computer fundamentals, Microsoft Office, HTML, Javascript, CSS, C++, Java and Linux Operating Systems. Students will develop web pages and sites and will learn to troubleshoot backend and frontend applications in a variety of workplace environments. Certification and dual credit opportunities.

**Construction Trades (973)** - *Do you like to build things and work with power tools? Are you interested in what it takes to build something from the ground up?* Students will be instructed in a variety of skills in several construction trades areas including carpentry, electrical, masonry, plumbing, and equipment operating. Students will learn the following carpentry skills, cutting, shaping and installation of building materials during the construction of buildings, bridges, concrete formwork, etc. Students will also learn aspects of the electrical trades by installing and repairing wiring, and maintaining electrical systems. Students will also learn relevant safety regulations and electrical codes to ensure that they perform a job properly. Students will study the art of masonry which includes bricks, concrete blocks, or natural stones to build structures that include walls, walkways, fences, and chimneys. Students will learn the systems of pipes, tanks, fittings, and other apparatus required for the water supply, heating, and sanitation in a building. This program also prepares students to safely maintain and operate different pieces of diesel equipment such as skid loaders and mini excavators. Student learning will include cost estimation and blueprint reading, use and maintenance of power and hand tools, general safety and building code requirements. Certification opportunities; OSHA 10, OSHA 30, American Ladder Safety.

**Cosmetology (976)** - *Are you interested in Hair, Make-up and Nails? Do you find yourself scrolling through style ads for current fashion industry trends?* A salon environment allows students to practice and prepare to become licensed cosmetologists. Students will gain skills in haircutting, hairstyling, chemical treatments, manicures and pedicures, as well as facial treatments. Information and training will be focused on salon safety and sanitation, customer service, and applicable labor laws and regulations. Students who successfully complete the 900 hours of coursework will be eligible to take the PA State Board of Cosmetology Examination. Upon passing the exam and completion of the remaining 350 hours of training the candidate will become a PA licensed Cosmetologist (1250 total training hours). Certification opportunities; Licensed Cosmetologist, Licensed Nail Technician, Licensed Esthetician, SP2 Cosmetology, and OSHA-10.

**Culinary Arts (978)** - *Do you enjoy cooking and baking? Do you like to watch culinary shows or dabble with creating your own recipes?* The students will gain the skills to effectively work safely and under pressure in the hospitality industry. Instruction will focus on following standardized recipes/formulas, instructions, time management, selecting, storing, preparing and serving food safely, wait staff training, menu planning and basic nutrition. Food safety and sanitation and learning the proper techniques to use and care for commercial equipment will be taught as well. Throughout the course, students will receive an introduction to culinary arts, baking and pastry arts, to include proper cooking methods and temperatures, soups, stocks and sauces, weighing and measuring with accuracy, and cake decorating. Instruction and on the job training will occur in our industry equipped kitchen and restaurant typesetting. Certification opportunities; Beef University, Lamb Curriculum, OSHA-eTool (Youngworkersafety), SP2, OSHA10, Servsafe-Allergens, FoodHandler, Manager, ProStart COA, Rouxbe-Professional Cooking, Heartsaver FirstAid/CPR, ACF(CFC), ACF(CC).

**Electrical Technology (987)** - *Are you into exploring how things work? Can you follow a complex set of directions to build something? All things electricity...* Students in this program will learn to install, operate, maintain and repair electrical systems. Use of electrical codes, circuit diagrams, and blueprint reading will be key components. Students will gain valuable experience working with transformers, capacitors, resistors, and conduit bending resulting in a solid background to working in the electrical field. Certification opportunities; OSHA 30, Ladder Safety, Heartsaver First Aid/CPR.

**Health Occupations Technology (989)** - *Do you see yourself working in the healthcare industry? Do you have compassion and like to help others? Are you interested in the human body and its systems?* Students choosing this program will gain knowledge to assist them in preparing for a future career in a health related field. The class will focus on basic structures and functions of the human body, related diseases with associated terminology, legal and ethical aspects of health care, and communication. Nutrition, safety, infection control, emergency care, and disaster preparedness are also studied. Students will combine core book knowledge with skills practice in order to be ready to meet the needs of the healthcare industry. Certification opportunities; AMCA-PCT Testing, First Aid/CPR.

**HVAC & Steamfitting (980)** - *Do you like to solve mechanical problems? Can you follow complex directions and enjoy using hand tools?* Students will learn to repair, install, service and maintain heating, air conditioning, and refrigeration systems as well as installing, assembling, fabricating, maintaining, and repairing mechanical piping systems. Students will learn diagnostic techniques, blueprint reading, the use of testing equipment, electronic and pneumatic control systems, and the principles of electricity, electronics and mechanics as each relates to the industry. Students will also learn how to overhaul, repair, and make adjustments to various units and parts. Certification opportunities; OSHA 10/30, EPA, 608 Refrigerant.

**Multimedia Design Technology (975)** - *Are you creative? Do you like to create art by hand and on the computer? Create advertisements, web pages and more... from sketching to photography and even creating your own ad campaigns that include video?* Students in this program will be able to apply knowledge and skills in the field of multimedia design. The elements and principles of art are the basis of good design. Combined with graphic design, audio, visual, web introduction, and photography this course provides the instruction necessary to develop a creative concept into a final visual communication product. Oral and written communication, customer service, and display production are a focus. Students will design, edit, and create projects using hand illustration and computer design software such as Adobe Illustrator, InDesign, Photoshop, Premiere, and AfterEffects. Certification opportunities; Adobe Certified Associate in multiple areas (Additional Certifications - Available Certifications - SP/2-LandthatJob! Building a Resume, SP/2- Time for a Team Huddle! Running Successful Team Meetings, SP/2- BeaPro! LifeSkills for Professional Success, SP/2 -Creating a Customer - Centered Culture, SP/2-Telephone Skills for Today's Professional World, SP/2 -Successful Meeting Management for Managers and Business Owners, Free Code Camp- Responsive Web Design Certification, Google- Digital Marketing, Google-Project Management, Hub Spot-Social Media Marketing and Great Learning - Intro to Graphic Design with Photoshop).

**Powerline (985)** - *Do you enjoy the outdoors? Would you say you are an all weather type of person who is not intimidated by heights? Is helping others through providing the resources of energy and communication interesting to you?* Students will gain technical knowledge and skills in installation, troubleshooting and repair of telecommunication equipment of all kinds. Throughout the course, students will gain a fundamental understanding of electricity and electronics and will learn about fiber optics and copper based systems. CWCTC students will have the opportunity to study pole and tower climbing techniques, trenching, high voltage installation, maintenance and inspection. safety and applicable codes and standards in regards to the powerline and telecommunications fields. Certification opportunities; National Ladder Safety, OSHA 10, Copper Networking, Fiber Optics.

**Protective Services (996)** - *Are you interested in public service and saving lives? Do you have a drive to help others in an emergency event? Would you like to protect and serve your community?* Our instructional program focuses on three areas of learning: firefighting services, emergency medical technician training, and law enforcement. Students will apply technical knowledge and skills required to work in the public safety sector and will be expected to learn a minimum level of proficiency in all areas of the training program. The program focuses on personal safety and the relationship between the public safety agencies. Skill sets within the program include vehicle and equipment operations, application of math skills, communication skills, and pre-hospital emergency medical assessment and treatment. Students will participate in live fire exercises in a simulated residential burn building. Certification opportunities; (EBM Program) ICS 100/700, HMA, PSFA Rope I, II, PA-DOH Basic Vehicle Rescue, (Exterior & Interior), First Aid/CPR.

**Restoration & Design (983)** - *Do you like to rearrange, paint or decorate your room and other spaces? Are you creative and like to explore design trends? Repurpose something to make it useful again through design, refinishing and repair techniques.* Students in this program will be prepared to apply technical knowledge and skills to finish exterior and interior structural surfaces by applying protective or decorative coating materials, such as paint, stain, and wallpaper. Includes instruction in surface preparation; selecting, preparing, and applying finishes. Students will learn equipment operation and maintenance; finish selection; safety and clean-up; environmental effects on finishes; adhesion properties; and applicable codes and standards. Design, color theory, and faux finishes are also explored. Certification opportunities; NCCER CORE, National Ladder Safety, OSHA 10.

**Robotics Engineering & Manufacturing (REM/Phoenix Manufacturing) (994)** *Do you have a technical and mechanical mindset? Are you interested in how things work and building something from the bottom up? How are manufacturing your own parts and designs? BotsIQ opportunities galore in this exciting and dynamic working lab. You will be working with our state of the art HAAS machines, 3 D Printers and more.* Robotics, Engineering & Manufacturing is a program focused on the development, installation, and use of Advanced Manufacturing devices. This program prepares students for careers in the engineering and manufacturing fields. Students enrolled will learn a combination of electronics, manual machining,

mechanical drives, CNC machining, fluid systems, programming, inspection, robotics, properties of materials, and engineering processes. Students who enjoy STEM activities will enjoy this classroom and will be engaged in designing, developing, and testing electromechanical devices, automation systems, manufacturing systems. Students will also learn how to work as a team and develop engineering solutions to problems. There is a focus on industrial systems and procedures. Certification opportunities: Certifications, CNC Mill/Lathe Certifications, OSHA 10 Certification.

**Service Occupations (988)** - *Do you like to do a variety of things both indoor and out? Do you enjoy helping others and creating a clean and welcoming environment? Would you like to work with customers?* Service Occupations is an innovative program focusing on training students in a diverse array of skill sets in service-related employment areas. Students will learn in an environment that fosters good work ethic, competitive time on task and appropriate work skills for each identified career area. The Service Occupations curriculum encompasses the areas of workplace safety, grounds maintenance, cleaning practices, housekeeping, custodial and retail stock, as well as, kitchen safety, cooking and baking, food preparation, dining room services, commercial dishwashing and commercial laundry services. All areas are instructed with the intent of achieving a level of competency commensurate with competitive employment. Certification opportunities; American Ladder Institute, ServeSafe Food Handler, First Aid/CPR ***\*Students and families interested in applying to this program will need to contact their school counselor for more details\****

**Sports Medicine (995)** - *Are you thinking about a career in healthcare and enjoy helping others? Interested in how the body responds to injury and how to improve athletic performance?* The goal of the Sports Medicine program is to prepare students for placement in a post-secondary institution for advanced studies in the health sciences. Course topics include medical terminology, anatomy and physiology, body systems, sports nutrition and hydration, and concussion management. Students will become proficient in the use of therapeutic modalities, vital signs assessment, injury diagnosis and management, and injury rehabilitation through therapeutic exercise and exercise prescription. Students who successfully complete the Sports Medicine program often enter the healthcare field as physical therapists, physical therapist assistants, occupational therapists, athletic trainers, physician assistants, exercise physiologists, sports psychologists, nurses, medical assistants, and rehabilitation aides. Certification Opportunities: BLS for the Healthcare Professional (CPR/AED); Articulations with local Colleges: Duquesne University, Robert Morris University, PennWest University.

**Welding & Metal Fabrication (993)** - *Are you interested in working in the metal industry? Do you like to build and design things? Design, Fabricate and Weld using industry tools of the trade, which includes a 4 x 8 ft. plasma cutting machine.* Students in this class will learn technical knowledge and skills to join or cut metal surfaces using stick welding, tig welding, mig welding, and flux core welding. Safety practices are a focus in this program. Instruction includes welding symbols, properties of metals, types and uses of electrodes and welding rods, and blueprint reading. Certification Opportunities; AWS Sense.