## WEST MIFFLIN AREA HIGH SCHOOL



## COURSE OF STUDIES 2024-2025

## Table of Contents 1

DISTRICT ADMINISTRATION ..... 1
HIGH SCHOOL ADMINISTRATION ..... 1
HIGH SCHOOL COUNSELORS ..... 1
DISCRMINATION POLICY ..... 1
MISSION STATEMENT ..... 2
FOREWORD ..... 2
GUIDANCE SERVICES IN SELECTION OF COURSES ..... 2
SUPPORTIVE SERVICES ..... 3
GRADUATION REQUIREMENTS ..... 4
PLANNING GUIDE ..... 5
KEYSTONE EXAM REQUIREMENTS ..... 5
ACT 158: PATHWAYS TO GRADUATION ..... 6
GRADE CLASSIFICATION ..... 8
REPORT CARDS AND GRADING SYSTEM ..... 8
HONOR ROLL ..... 8
HOW TO CALCULATE HONOR ROLL ..... 9
DUAL ENROLLMENT ..... 10
COLLEGE IN HIGH SCHOOL ..... 10
RECOMMENDED TIMETABLE FOR COLLEGE ADMISSION TESTING ..... 10
NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA) ..... 11
GUIDELINES FOR COURSE SELECTION ..... 12
DROPING/ADDING COURSES ..... 12
INDEPENDENT STUDY ..... 13
SCHOOL TO WORK PROGRAM ..... 13
GAMING CONCEPTS ..... 13
YEARBOOK DESIGN ..... 14
ONLINE ONLY COURSES ..... 14
COURSES OFFERED AT WEST MIFFLIN AREA HIGH SCHOOL
ENGLISH ..... 16
ENGLISH ELECTIVES. ..... 25
SOCIAL STUDIES ..... 26
SOCIAL STUDIES ELECTIVES ..... 31
MATHEMATICS ..... 36
SCIENCE ..... 42
SCIENCE ELECTIVES ..... 49
WORLD LANGUAGES ..... 52
BUSINESS ..... 57
VISUAL ARTS ..... 61
MUSIC AND THEATER ..... 66
FAMILY AND CONSUMER SCIENCE ..... 72
TECHNOLOGY EDUCATION ..... 77
PHYSICAL EDUCATION AND HEALTH ..... 82
AIRFORCE JROTC ..... 87
$12^{\text {TH }}$ GRADE MISCELLANEOUS OPPORTUNITIES ..... 92
CAREER INTERNSHIP/EMERGING LEADERS. ..... 92
CAREER INTERNSHIP ..... 93
DUAL ENROLLMENT ..... 93
STUDENT SECRETARY ..... 93
SCHOOL TO WORK ..... 93
SERVSAFE INDUSTRY CERTIFICATION ..... 93
OSHA10 CERTIFICATION ..... 94
STEEL CENTER MAJORS ..... 95

# West Mifflin Area High School 

91 Commonwealth Avenue
West Mifflin, PA 15122
412-466-9131

## DISTRICT ADMINISTRATION

Jeffrey Soles - Superintendent<br>Dr. Jeffrey Solomon - Assistant Superintendent<br>Edward Wehrer - Business Manager<br>Mark Zidek - Director of Building and Grounds<br>Noelle Haney - Director of Pupil Services<br>Dayna Sikora - Director of Special Education

## HIGH SCHOOL ADMINISTRATION

Chad Licht - High School Principal
Robert Yeschenko - Principal Grades 10 \& 12
Bilal Cook - Dean of Students 9 \& 11
Dr. Brain Plichta - Cyber Principal \& Grade 9

## HIGH SCHOOL COUNSELORS

> Tom Ruffing $-\left(10^{\text {th }}-12^{\text {th }}\right.$ Last Names $\left.(\mathrm{A}-\mathrm{L})\right)$
> Jennifer Shields $-\left(10^{\text {th }}-12^{\text {th }}\right.$ Last Names $\left.(\mathrm{M}-\mathrm{Z})\right)$
> John Inglis $-\left(9^{\text {th }}\right.$ Last Names $(\mathrm{A}-\mathrm{Z}) \& 8^{\text {th }}$ Grade Transition $)$

## Discrimination Policy

It is the policy of the District not to discriminate on the basis of race, sex, religion, color, national origin, ancestry, age or handicap, in its educational programs, services, facilities, activities or employment policies as required by Title IX of the 1972 Educational Amendments, Title VI and VII of the Civil Rights Act of 1964 as amended, Section 504 Regulations of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Section 204 Regulations of the 1984 Carl D. Perkins Act, the Americans with Disabilities Act or any other applicable Federal or State statutes.

## Mission Statement

"The mission of the West Mifflin Area High School - in partnership with families and community - is to establish a challenging and safe learning environment, where all students will attain the quality education and life experiences to become responsible life-long learners and contributing members of an ever-changing global society."

We are dedicated to enabling students to be responsible, contributing, and ethical citizens.

## Foreword

The Program of Studies booklet is designed to assist you with the selection of courses and programs at West Mifflin Area High School. It provides academic information and individual course selection. The goal of course selection is to ensure proper placement into a variety of courses based on each student's abilities and interests.

Please carefully review the Program of Studies prior to planning a schedule. Careful thought should be given to student ability, past academic achievement and future goals.
The administration reserves the right to cancel any class due to lack of enrollment or available certified teacher.

## Guidance Services in Selection of Course

The guidance office is organized into three groups. Students will be assigned to a counselor by last name. Students can visit with their counselor upon request or by making an appointment through the guidance secretary, but all students will be required to meet with their counselor at least once a year. Students may be requested to meet with their counselor several times a year depending on their need.

For any additional information, please call one of our counselors at (412) 466-9131:
Tom Ruffing - $\left(10^{\text {th }}-12^{\text {th }}\right.$ Last Names (A-L)) ---------------------Extension 1009
Jennifer Shields $-\left(10^{\text {th }}-12^{\text {th }}\right.$ Last Names (M -Z$\left.)\right)$--------------Extension 1008
John Inglis $-\left(9^{\text {th }}\right.$ Last Names $(\mathrm{A}-\mathrm{Z}) \& 8^{\text {th }}$ Grade Transition) - - Extension 1010
Students in all grade levels are invited to visit the Career Center located in the Guidance Office. This is a resource center designed to assist the students in their career decision-making. Students will find a variety of reference materials:

- College and trade school directories
- Military information
- Reference books and scholarships
- Study materials on the PSAT, SAT and ACT
- Computers that are programmed to print information on two-year and four-year college, trade schools, financial aid, career interest survey.


## Supportive Services

## Student Assistance Program (SAP)

The Pennsylvania Student Assistance Program (SAP) is a systematic team process used to mobilize school resources to remove barriers to learning. SAP is designed to assist in identifying issues including alcohol, tobacco, other drugs, and mental health issues which pose a barrier to a student's success. The primary goal of the Student Assistance Program is to help students overcome these barriers so that they may achieve, advance, and remain in school.

## (ACE) Gifted Support

ACE - All identified gifted students are eligible to participate. ACE is designed to offer a continuum of services to meet the varied needs of gifted students. An assortment of delivery options is available for students within the Gifted program based upon students' individual needs and interests. The program also addresses specific needs of each student through activities such as competitions, workshops, and seminars.

## (ESL) English as a Second Language

ESL - The goal is to facilitate the development and attainment of English proficiency and academic achievement of students who's native or first language is not English.

## Special Education Services

Special Education services are provided to all students in accordance with the Individuals with Disabilities Education Act (IDEA) and PA Chapter 14 Programs and Services. Special education services are provided based on the primary educational needs of the student, not the category of the disability.

## Life Skills

These students require instruction in daily living skills in addition to receiving instruction in functional Science, English and Mathematics utilizing the alternative eligible content that is aligned to the PA Core Standards. The aim of the program is to give high school students the tools and resources to make smart life and health decisions they will need going forward. In addition to academic programs, students are instructed in practical and functional living skills in order to prepare them to function appropriately in the community, work place and home. These programs include a multitude of areas such as self-care, pre-vocational skills, daily living skills and community-based instruction.

## Graduation Requirements

Graduation from West Mifflin Area High school requires satisfactory completion of a minimum of $\underline{23}$ credits* in grades nine through twelve.

Any class that meets five days a week for the entire term of 183 days is considered one credit. Any class that meets five days a week for one semester of 91 days is considered one-half credit. Other courses that do not meet five days a week are adjusted for credit value. Each student is required to complete the following courses:


All courses taken for credit will be included in class rank except for physical education and any course graded on a pass/fail basis. Arts and humanities include courses in the areas of fine and practical arts, foreign language, literature and additional social studies. These courses must be taken in addition to the required courses. Students may be required to complete a more enriched program if their goal mandates this completion. For example, students who wish to complete a pre-college level program with an emphasis on math and science may be required to complete four years of math and an advanced science course. Students who want an enriched humanities curriculum may complete five units of language arts and/or five units of social studies. The goal selected will dictate the program.

## Additional Provisions

Students with disabilities may meet the graduation requirements specified above or may graduate upon satisfactorily completing a special education program developed by an Individualized Education Program team under the Individuals with Disabilities Education Act

## Planning Guide

The following program of study is offered as a model for a four-year sequence in a nine-period day. It is not the only model that could lead to graduation:

| Courses | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :--- | :--- | :--- | :--- |
| 1 | English | English | English | English |
| 2 | Civics | Morld History | US History | Soc Stud Elective |
| 3 | Mathematics | Science | Science | Science <br> (Recommended) <br> (Recommended) |
| 4 | Science | Freshmen <br> Seminar** | Physical Educ <br> (Semester) | Elective <br>  <br> Personal <br> Finance <br> required) |
| 5 | Elective |  |  |  |

**The Freshmen Seminar is a yearlong course that includes Physical Education/ Health/ Careers and Word for all ninth-grade students.

## Keystone Exam Graduation Requirement

Effective beginning with the Class of 2019, any student who graduates from the West Mifflin Area School District, must demonstrate minimum competency skills in the areas of math, reading, and writing.
Demonstrating these minimum competencies can be achieved through the following means: Earning an Advanced or Proficient rating on the Keystone by the junior year.

Act 158 provides alternatives to Pennsylvania's statewide requirement of attaining proficiency on the three end-of-course Keystone Exams (Algebra I, Literature and Biology) for a student to achieve statewide graduation requirements.

For students graduating in 2023 and beyond, five pathways exist for meeting state high school graduation requirements:

- Keystone Proficiency
- Keystone Composite
- Career and Technical Education (CTE) Concentrator
- Alternative Assessment
- Evidence-Based


## Excusal from the Keystone Exam

Chapter 4 of Title 22 of the Pa . Code ( 22 Pa . code 4.4 ) provides for the right of any parent/guardian to excuse his/her child from the state assessment if, upon inspection of the testing materials, he/she finds the assessment to be in conflict with his/her religious beliefs. This is the only basis for a parent/guardian to excuse his or her child from the statewide assessments.

## Procedure for parent/guardian to request that student be excused from the Keystone Exam:

The parent/guardian needs to initiate contact with the school with a request for his/her student to be excused from the assessment(s).

1. Two weeks prior to the assessment(s), the principal will schedule an appointment for the parent/guardian to come in and view the exam(s). The parent/guardian must sign the Parent Confidentiality Agreement provided by the Pennsylvania Department of Education prior to viewing the exam. No written notes, video, or pictures can be taken of the material. The objection process is not complete until the parents view the exam(s) in the school. If the parent/guardian wants the student to be excused from several exams (i.e. ELA and Math), then the parent/guardian will need to view all of these exams.
2. The parent/guardian submits a written request to the school principal, with a copy to the Superintendent, stating a request to have his/her child opt out of the assessment due to a religious objection. The letter must list the specific name(s) of each assessment about which there is an objection.
3. A parent/guardian will need to make this request each year he/she wishes the student to be excused and he/she will need to view the exam(s) each year as well.
4. The principal will confirm with the parent/guardian that the child will be excused.

## Act 158: Pathways to Graduation

For students graduating in 2023 and beyond, the following options exist to meet the statewide graduation requirement:

- Keystone Proficiency Pathway: Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.
- Keystone Composite Pathway: Earning a composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams (while achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two).
- Alternative 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; and
- Two additional pieces of evidence, including one or more of the options listed above, or: satisfactory completion of a service learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0 .
- CTE Pathway: For Career and Technical Education (CTE) Concentrators, successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and attainment of an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study.

For further explanation of the CTE Pathway, please see PDE's Act 6 guidance.
A composite Keystone score will be released in August of 2019. Established cut scores for alternate
assessments and guidelines to define pathway evidence will be released in the 2019-20 school year. assessments and guidelines to define pathway evidence will be released in the 2019-20 school year.

More information about the new statewide graduation requirement effective with the graduating class of 2023 is available on the PDE website.

## Grade Classification

In order for a student to be considered a member in proper academic standing of his/her next year's class:

- Freshman (Grade 9) - Must have completed a minimum of 6 credits to be considered a sophomore.
- Sophomore (Grade 10) - Must have completed a minimum of 12 credits to be considered a junior.
- Junior (Grade 11) - Must have completed a minimum of 18 credits to be considered a senior.
- Senior (Grade 12) - Must complete a minimum of 24 credits to graduate.


## REPORT CARDS AND GRADING SYSTEM

Report cards are issued every nine weeks. These reports show your progress in school. The marking system represents five levels of achievement. These levels indicate a student's achievement as compared to the criterion established for the course involved. Success breeds success. Students should set a goal and work to attain it.

| $90-100$ | $A$ |
| ---: | :--- |
| $80-89$ | $B$ |
| $70-79$ | $C$ |
| $60-69$ | $D$ |
| $0-59$ | F |

## HONOR ROLL

Students with outstanding academic achievement are to be placed on the honor roll. Each nine-week period a new honor roll is to be posted. Its purpose is:
A. To give recognition and to dignify scholastic achievement.
B. To give motivation and incentive to students.

Physical education grades are not calculated into class rank or honor roll, but any class including physical education with a grade below "C" will eliminate a student from the Honor Roll.

Honor courses are weighted as follows: $\mathrm{A}=4.5 \quad \mathrm{~B}=3.5 \quad \mathrm{C}=2.5 \quad \mathrm{D}=1.5 \quad \mathrm{~F}=0$
Advanced-Placement courses are weighted as follows: $\mathrm{A}=5 \quad \mathrm{~B}=4 \quad \mathrm{C}=3$
All other courses are as follows: $\quad \mathrm{A}=4 \quad \mathrm{~B}=3 \quad \mathrm{C}=2 \quad \mathrm{D}=1 \quad \mathrm{~F}=0$

A student will not be considered for the honor roll if he has an incomplete or X grade. All incomplete grades must be removed from the report card within two weeks, or they become F's.

High Honor: Quality Point Average 3.75 or above
Honor: $\quad$ Quality Point Average 3.1 to 3.749
Every quarter: report cards are posted on PowerSchool and honor rolls are posted. Paper copy of report card can be requested by contacting the high school main office.

## HOW TO CALCULATE HONOR ROLL

Honor Roll is calculated in the following way:

1. Total your credits for the grading period;
2. Total your quality points, per grade - as attached to each credit (i.e., - full points, per letter grade are awarded for a full credit course - while $1 / 2$ the points are awarded for $1 / 2$ credit course);
3. Divide your total quality points by the total number of credits - the result equals your grade point average.

Please Note: High Honors - 3.7 \& above
Honors - 3.1
No student is eligible for Honor Roll if a D, F or I grade appears on the report card Grades are not rounded up. (i.e., a 2.90 is not rounded to 3.0)

Quality points are assigned as follows:

1. One credit subjects $-\mathrm{A}=4, \mathrm{~B}=3, \mathrm{C}=2, \mathrm{D}=1, \mathrm{~F}=0$
2. Half credit subjects - $\mathrm{A}=2, \mathrm{~B}=11 / 2, \mathrm{C}=1, \mathrm{D}=1 / 2, \mathrm{~F}=0$
3. One credit Honors subjects - $\mathrm{A}=4.5, \mathrm{~B}=3.5, \mathrm{C}=2.5, \mathrm{D}=1.5, \mathrm{~F}=0$
4. One credit AP subjects $-\mathrm{A}=5, \mathrm{~B}=4, \mathrm{C}=3, \mathrm{D}=2, \mathrm{~F}=0$

Example A If a student has 18 quality points and 6 credits - divide 18 by 6 and the grade point average $=3.00$.
Example B Mock Report Card - Final GPA

|  | Credit | Grade | Points |
| :--- | :---: | :--- | :--- |
| English | 1 | B | 3 |
| History | 1 | B | 3 |
| Math | 1 | A | 4 |
| Science/Chem. | 1 | A | 4 |
| Drawing | .5 | A | 2 |
| PE |  | A |  |
|  | $\mathbf{4 . 5}$ |  | $\mathbf{1 6}$ |

Grade Point Average $=\mathbf{3 . 5 5}$

## DUAL ENROLLMENT / COLLEGE IN THE HIGH SCHOOL

Dual Enrollment Programs and College in the High School Programs allow qualified students to take college courses while enrolled in high school. Credits are accepted by most colleges nationwide, making the programs a great way for students to get a jump start on a college degree.

## COLLEGE IN HIGH SCHOOL CLASSES (CHS)

College in the High School (CHS)classes are college-level courses which are taught at the high school by high school teachers using college curriculum with oversight from college faculty and staff. Students earn college credit by passing the course and paying reduced tuition for the credits.

| CHS U.S. History | CHS Psychology | CHS Algebra | CHS Chemistry | CHS Physics |
| :---: | :---: | :---: | :---: | :---: |
|  <br> Physiology | CHS Biology |  <br> Composition | CHS Literature <br> and Composition | CHS Statistics |
| CHS Calculus AB | CHS Calculus BC |  |  |  |

RECOMMENDED TIMETABLE FOR COLLEGE ADMISSION TESTING

| Fall, Sophomore/Junior Year | P.S.A.T./N.M.S.Q.T. | - Practice Test for SAT <br> - Designed for Juniors (can be taken by Sophomores who are accelerated in math and English courses) <br> - Assesses aptitude in area of verbal, writing and numerical reasoning and writing skills. <br> - Provides academically talented juniors an opportunity to compete for scholarship awards offered by National Merit Scholarship Corporation if taken in their junior year. |
| :---: | :---: | :---: |
| Spring Junior Year, Fall Senior Year | $\begin{aligned} & \text { S.A.T. } \\ & \text { A.C.T. } \end{aligned}$ | - Assesses aptitude in area of verbal, writing and numerical reasoning <br> - Can be taken multiple times |

## NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)

## ELIGIBILITY STANDARDS

In order to participate in a Division I or Division II sport in college, a student must meet the minimum requirements for core courses established by the NCAA
For more information.... http://fs.ncaa.org/Docs/eligibility center/Quick Reference Sheet.pdf

## NCAA DIVISION I ACADEMIC REQUIREMENTS

College-bound student-athletes first enrolling at an NCAA Division I school on or after Aug. 1, 2018, need to meet new academic rules to practice, compete and receive athletics scholarships during their first year.

## NCCA DIVISION II ACADEMIC REQUIREMENTS

College-bound student-athletes first enrolling at an NCAA Division II school on or after Aug. 1, 2018, need to meet new academic rules to practice, compete and receive athletics scholarships during their first year.

FOR MORE SPECIFIC INFORMATION, PLEASE VISIT WWW.NCAA.ORG

| DIVISION I 16 CORE-COURSE RULES | DIVISION II 16 CORE-COURSE RULES |
| :---: | :---: |
| 16 Core Courses: | 16 Core Courses: |
| 4 Years of English | 3 Years of English |
| 3 Years of Mathematics (Algebra I or higher) | 2 Years of Mathematics (Algebra I or higher) |
| 2 Years of Natural/Physical Science (1 year of lab if offered) | 2 Years of Natural/Physical Science (1 year of lab if offered) |
| 1 Year of additional English, Mathematics or Natural/Physical Science | 3 Years of additional English, Mathematics or Natural/Physical Science |
| 2 Years of Social Science | 2 Years of Social Science |
| 4 Years of additional courses (from any of the above, World Language or comparative Religion/Philosophy) | 4 Years of additional courses (from any of the above, World Language or comparative Religion/Philosophy) |

PLEASE NOTE: If you are planning to participate in a Division I or Division II sport in college, please see you counselor prior to scheduling you courses.

## GUIDELINES FOR COURSE SELECTION

Items to remember as your student selects courses for the school year:

- Students who plan on attending a four-year college after high school are strongly encouraged to take at least three years of a foreign language, obtain a working knowledge of computers and technology and enroll in a mathematics course in their senior year of high school. Students who plan on continuing their formal education at a two-year or four-year degree granting institution are strongly encouraged to take the SAT or ACT exam during their junior year
- All $11^{\text {th }}$ grade students will be required to complete a semester ( .5 credit) Junior Seminar course.
- Course of studies booklets and course selection sheets should be available during the month of February online at www.wmasd.org/highschool as well as through Schoology.
- Physical Education must be taken each year of high school.
- Course requests can be changed at the request of the student or parent. These changes will be honored when possible until the counselors leave for the summer. Students may not choose teachers or change course sections to avoid instructors.


## Dropping/Adding a Course

West Mifflin Area High School will require that a form be filled out by the student in order to drop or add a course. It is the student's responsibility to obtain this form located in guidance and receive all necessary signatures before returning to guidance. Schedule changes will be addressed only after the drop/add form is completed.

## Drop/Add Procedures

- Students will be allowed to drop classes within the first 15 days of a yearlong course and the first 10 days for a semester course without penalty.
- Every dropped class MUST be replaced with another class. A student should maintain a minimum of 6 credits.
- Extenuating Circumstances - If the course is approved to be dropped after the above deadlines and the student is failing, that student will receive a withdrawal fail "WF" on their report card and transcripts. Students will receive a withdraw pass "WP" for a full year course dropped at the end of the second nine weeks (only if passing the course). When either of these situations occur, the "WP' or "WF" will appear on the student's report card and permanent transcript.


## Independent Study

Independent studies provide a way for well-motivated students to pursue a topic of interest that does not necessarily fit into a traditional academic schedule. As a result, a student can propose to have an independents study to meet their learning needs.
$>$ Independent study courses are available to $\mathbf{1 0}^{\text {th }}, \mathbf{1 1}^{\text {th }}$ and $\mathbf{1 2}^{\text {th }}$ grade students. A maximum of 2 credits will be permitted per year.
$>$ A student may not take an independent study for a previously failed course.
$>$ Independent study classes are not weighted. College in High School and AP courses will not be offered on an independent study basis.
$>$ Students are required to meet with the instructor for support and on-going evaluation for the duration of the independent study project.
$>$ Students will maintain a log and submit it to the teacher for approval.
$>$ Teachers will review the completed independent study project and assign a final grade for the course. Students proposing an independent study course must submit a typed proposal which they have developed with the help of the supervising teacher. The proposal must contain the following:

- Specific objectives to be accomplished (including the final project)
- The method(s) by which the objectives will be accompanied
- The materials required to accomplish the objectives
- A plan for evaluating the success of the objectives

HS0999 SCHOOL TO WORK PROGRAM
9 weeks to One Year

Grade 11,12
.25 credits earned per nine weeks

The school-to-work program allows high school juniors and seniors the opportunity to earn elective credits for jobs they perform outside of the school setting. Upon submitting the required documentation and confirmation of employment, the student can earn $1 / 4$ credit per 9 week grading period. A maximum of 1 elective credit per year may be awarded for maintaining a job while enrolled as a student at the high school.

## HS0830 GAMING CONCEPTS <br> Grade 11,12 <br> Semester 5 period .5 credit

This semester course offers students the opportunity to explore Gaming Appreciation, Gaming Behavior, eSports, history of game consoles and systems, gaming PC design, and other topics within gaming. Students who are interested in taking this course do not need to have any prior experience with gaming.

Yearbook Design is a production-based elective course that creates The Titan yearbook. In this course, students will gain skills in the areas of page design, publishing techniques, copy writing, editing, and photography while producing a creative, innovative yearbook, which records school memories and events throughout the school year. Students will be responsible for taking digital photos, conducting interviews, composing, designing, and editing all elements of text, graphics, and digital layouts. This course requires students to be available outside of regular class time to attend sporting events, student activities, etc. Students are expected to be organized, motivated, creative, and possess strong reading and writing skills upon entering the class.

## HS0045C Foundational Skills <br> One Semester Online Pass/Fail

Grade:10-12
.5 Credit
Practice makes perfect! This class will focus on students using the library's Peterson's Test and Career Prep program to practice the foundational skills needed to be successful in both testing and classroom environments. Interactive tutorials allow students to review reading, writing, math, and science (time permitting) basic skills. These tutorials allow students to identify skills that they have mastered and skills that need additional reinforcement before taking upper-level exams like the SAT and ACT.

## HS0046C SAT \& ACT

## Grade: 2nd semester 10th, any 11,12

 . 5 CreditThis class will focus on student's using the library's Peterson's Test and Career Prep program to prepare for these admissions exams. SAT \& ACT preparation will be covered using the online interactive tutorial classes, practice tests for both tests, and access to online testing preparation books.

HS0047C ACCUPLACER Prep
Grade: 2nd semester 11th, any 12th
One Semester Online Pass/Fail
The College Board's Accuplacer test is a computer-based placement test that assesses math, reading and writing skills and includes reading comprehension, sentence skills, arithmetic, elementary algebra, college-level mathematics and a writing test. The test is used by more than 1,000 high schools and colleges to determine a student's needed placement in community colleges. This class will focus on student's using the library's Peterson's Test and Career Prep program to prepare for these placement tests.

## HS0048C ASVAB Prep

Grade: 10, 11, 12
One Semester Online Pass/Fail
The Armed Services Vocational Aptitude Battery (ASVAB) is a military eligibility exam consisting of nine sections: General Science, Arithmetic Reasoning, Word Knowledge, Paragraph Comprehension, Auto \& Shop, Mathematics Knowledge, Mechanical Comprehension, Electronics Comprehension, and Assembling Objects. It's primary purpose is to determine your basic skills and your aptitude for other skills. This course provides interactive lessons and practice tests for the Armed Services Vocational Aptitude Battery (ASVAB), with detailed answers and explanations to every question.

This introductory course will cover the use of the Library Information Center's digital branch for research and literacy while also covering how to manage information including annotating, notetaking, and utilizing Microsoft OneNote among other techniques. Introduction to the MLA format stylesheet for writers of research projects is included as well as how to locate and use sources including e-books, e-periodicals, and databases for personal as well as academic use.

## HS0044C Beyond the Bookcase 2 @ Your Library One Semester Online Pass/Fail

This course will cover the more advanced uses of digital tools for research and literacy available through the Library Information Center's digital branch and the PA POWER Library program. In depth use of specialty databases, web sites, e-books, and e-periodicals will be covered. Utilizing those tools for academic research, advanced MLA formatting, APA formatting, and reviewing information for validity are emphasized. Students will be using Microsoft OneNote during the class.

# ENGLISH <br> 4 CREDITS REQUIRED FOR GRADUATION 

The English curriculum from grades 9-12 is designed to make students more proficient in all aspects of communication. Through a variety of course offerings and teaching techniques, the students will improve their language usage and vocabulary development, their writing abilities and public speaking skills, their research skills, and their overall literacy.

## HS0124 ENGLISH 9

Grade 9
One year - 5 periods
1 credit
Prerequisite: Passing grade in an English 8 course
The ninth-grade course of study is designed to refine oral and written communication skills taught in previous grades. The main objective of the course is to become proficient in the standard usage of spoken and written English through the study of grammar, writing, and literature. Coursework will focus on the PA Common Core Standards, and assessments will include a variety of writings, quizzes, projects, tests, and homework.

All freshmen are required to complete a library literacy unit, taught by the Library Information Specialist, which focuses on the research process, plagiarism, and MLA documentation.

HS0124C CYBER ENGLISH 9
Grade 9
One year - 5 periods
Prerequisite: Passing grade in an English 8 course
The ninth-grade course of study is designed to refine oral and written communication skills taught in previous grades. The main objective of the course is to become proficient in the standard usage of spoken and written English through the study of grammar, writing, and literature. Coursework will focus on the PA Common Core Standards, and assessments will include a variety of writings, quizzes, projects, tests, and homework.

All freshmen are required to complete a library literacy unit, taught by the Library Information Specialist, which focuses on the research process, plagiarism, and MLA documentation.

HS0125 ENGLISH 9 HONORS
One year- 5 periods

Grade 9
1 credit - Honors weight

Note: English 9 Honors entitles students to an extra $1 / 2$ quality point.
Prerequisite: Teacher recommendation and average grades in English 8 Honors or aboveaverage grades in English 8

The focus of this course will be to foster critical reading and thinking, promote discussion, and improve written expression. Students will build independent study habits and individual thought through the study of literature. Writing assignments will emphasize establishing a clear purpose, using appropriate evidence from literary sources, and following conventions of grammar.

All coursework will adhere to the PA Common Core Standards, and assessments will include a variety of writings, quizzes, projects, tests, and homework.

HS0125C CYBER ENGLISH 9 HONORS
One year- 5 periods

Grade 9
1 credit - Honors weight

Note: English 9 Honors entitles students to an extra $1 / 2$ quality point.
Prerequisite: Teacher recommendation and average grades in English 8 Honors or aboveaverage grades in English 8

The focus of this course will be to foster critical reading and thinking, promote discussion, and improve written expression. Students will build independent study habits and individual thought through the study of literature. Writing assignments will emphasize establishing a clear purpose, using appropriate evidence from literary sources, and following conventions of grammar.

All coursework will adhere to the PA Common Core Standards, and assessments will include a variety of writings, quizzes, projects, tests, and homework.

## HS0133 ENGLISH 10

Grade 10
One year - 5 periods
1 credit
Prerequisite: Passing grade in an English 9 course
Students will critically read and respond to a variety of genres, both fiction and non-fiction, from around the world. Instruction emphasizes study skills and critical thinking skills.

Coursework will focus on the PA Common Core Standards to prepare students to successfully pass the Keystone Literature Exam at the conclusion of their sophomore year. Assessments will include a variety of writings, quizzes, projects, tests, and homework.

All sophomores are required to complete a library literacy unit, taught by the Library Information Specialist, which focuses on the research process, plagiarism, and documentation using the MLA format for writers of research papers.

HS0133C CYBER ENGLISH 10
Grade 10
One year - 5 periods
1 credit
Prerequisite: Passing grade in an English 9 course
Students will critically read and respond to a variety of genres, both fiction and non-fiction, from around the world. Instruction emphasizes study skills and critical thinking skills.

Coursework will focus on the PA Common Core Standards to prepare students to successfully pass the Keystone Literature Exam at the conclusion of their sophomore year. Assessments will include a variety of writings, quizzes, projects, tests, and homework.

All sophomores are required to complete a library literacy unit, taught by the Library Information Specialist, which focuses on the research process, plagiarism, and documentation using the MLA format for writers of research papers.

HS0134 ENGLISH 10 HONORS
One year - 5 periods

Grade 10
1 credit - Honors weight

Note: English 10 Honors entitles students to an extra $1 / 2$ quality point
Prerequisite: Teacher recommendation and average grades English 9 Honors or above-average grades in English 9

The communication process (writing, in particular) is the core of English 10 Honors. Students taking this course will be expected to read independently. Communication skills are enhanced through group discussions and brief oral presentations. Coursework will address the PA Common Core Standards as students prepare to take the Keystone Literature Exam at the conclusion of their sophomore year.

Students in this course also complete a library literacy unit, which focuses on the research process, plagiarism, and MLA documentation.

## HS0134C CYBER ENGLISH 10 HONORS

## Grade 10

One year - 5 periods
Note: English 10 Honors entitles students to an extra $1 / 2$ quality point
Prerequisite: Teacher recommendation and average grades English 9 Honors or above-average grades in English 9

The communication process (writing, in particular) is the core of English 10 Honors. Students taking this course will be expected to read independently. Communication skills are enhanced through group discussions and brief oral presentations. Coursework will address the PA Common Core Standards as students prepare to take the Keystone Literature Exam at the conclusion of their sophomore year.

Students in this course also complete a library literacy unit, which focuses on the research process, plagiarism, and MLA documentation

HS0140 ENGLISH 11
One year - 5 periods

## Grade 11

1 credit

Prerequisite: Passing grade in an English 10 course
Students will read critically and respond to a variety of fiction and non-fiction from the canon of American literature. This course will afford students an opportunity to interpret and analyze American literature by means of classroom discussion and written composition. Writings will include narrative, persuasive, descriptive, expository, and creative. Emphasis will be placed on refining skills often assessed on placement exams and collegeentrance exams.

HS0140C CYBER ENGLISH 11
Grade 11
One year - 5 periods
1 credit

Prerequisite: Passing grade in an English 10 course
Students will read critically and respond to a variety of fiction and non-fiction from the canon of American literature. This course will afford students an opportunity to interpret and analyze American literature by means of classroom discussion and written composition. Writings will include narrative, persuasive, descriptive, expository, and creative.
Emphasis will be placed on refining skills often assessed on placement exams and collegeentrance exams.

HS0144 ENGLISH 11 HONORS
One year - 5 periods

Grade 11
1 credit - Honors weight

Note: English 11 Honors entitles students to an extra ${ }^{1 / 2}$ quality point per grade
Prerequisite: Teacher recommendation and average grades in English 10 Honors or aboveaverage grades in English 10

Students will study American literature from several genres as a means to refine skills in both written and oral communication. Emphasis will be placed on the cultivation of students' critical reading and analytical writing competencies.

Writing will include literature-based exposition, argumentative writing, synthesis essays, and writing for the SAT. Additionally, students will begin defining the style and elevating the complexity of their written expression through the various modes of discourse. Oral presentations will highlight the importance of documented research and the understanding of persuasive techniques.

HS0144C CYBER ENGLISH 11 HONORS
One year - 5 periods
Grade 11
Note: English 11 Honors entitles students to an extra $1 / 2$ quality point per grade
Prerequisite: Teacher recommendation and average grades in English 10 Honors or aboveaverage grades in English 10

Students will study American literature from several genres as a means to refine skills in both written and oral communication. Emphasis will be placed on the cultivation of students' critical reading and analytical writing competencies.

Writing will include literature-based exposition, argumentative writing, synthesis essays, and writing for the SAT. Additionally, students will begin defining the style and elevating the complexity of their written expression through the various modes of discourse. Oral presentations will highlight the importance of documented research and the understanding of persuasive techniques.

HS0110 ENGLISH 11 AP/CHS LANGUAGE AND COMPOSITION
Grade 11
One year - 5 periods
1 credit-AP Weight
Note: This course entitles students to an extra quality point.
Prerequisite: Superior grade in an English 10 course and teacher recommendation
The AP Language and Composition course "focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and
cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts-including images as forms of text-including images as forms of text-from a range of disciplines and historical periods" (The College Board, AP® English Language and Composition Course Overview 2019).

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum as well as the Seton Hill University College in High School Course SEL105-Composition and Culture (Part A).

Students are encouraged to take the College Board AP Language and Composition exam that may make them eligible for college credit or register for College in High School (CHS) credits through Seton Hill University (SHU).
This course may require students to complete a summer assignment.

HS0153 ENGLISH 12
One year - 5 periods

## Grade 12

1 credit

Prerequisite: Passing grade in an English 11 course
This senior-level English course will help students develop an understanding of the skills necessary for success at the next level of their education. Through the study of both British and American literature, students will address themes that brought about change in the world as they prepare to graduate.

Oral presentations and writing assignments will focus on analysis and evaluation of rigorous texts. Additionally, students work towards advancing the style and complexity of their written expression through personal and reflective writings, such as the college admission essay.

Students complete a graduation project and must explain to a panel their post-secondary goals based upon a culmination of research and job shadowing experiences. Overall, this course promotes a culture of ongoing and voluntary lifelong learners ready to adapt to ever-changing careers in the $21^{\text {st }}$ century.

HS0153C CYBER ENGLISH 12
One year - 5 periods

## Grade 12

1 credit

Prerequisite: Passing grade in an English 11 course
This senior-level English course will help students develop an understanding of the skills necessary for success at the next level of their education. Through the study of both British and American literature, students will address themes that brought about change in the world as they prepare to graduate.

Oral presentations and writing assignments will focus on analysis and evaluation of rigorous texts. Additionally, students work towards advancing the style and complexity of their written expression through personal and reflective writings, such as the college admission essay.

Students complete a graduation project and must explain to a panel their post-secondary goals based upon a culmination of research and job shadowing experiences. Overall, this course promotes a culture of ongoing and voluntary lifelong learners ready to adapt to ever-changing careers in the $21^{\text {st }}$ century.

HS0155 ENGLISH 12 HONORS
One year - 5 periods

Grade 12
1 credit - Honors weight

Note: English 12 Honors entitles students to an extra $1 / 2$ quality point per grade
Prerequisite: Teacher recommendation and average grades in English 11 Honors or AP/CHS Language and Composition or above-average grades in English 11

This course will prepare students to become independent, self-motivated, life-long learners. This course focuses post-secondary readiness through the close reading and critical analysis of fictional and informational texts.
Oral presentations and writing assignments will highlight the importance of documented research and complex problem solving. Writing assignments will focus on literary analysis and evaluation of rigorous texts. Emphasis will also be placed on having students develop stylistic maturity, through assignments such as the college admissions essay.

Students will complete a graduation project in which they explain their post-secondary goals to a panel of teachers.

## HS0155C CYBER ENGLISH 12 HONORS

One year - 5 periods

Grade 12
1 credit - Honors weight

Note: English 12 Honors entitles students to an extra $1 / 2$ quality point per grade
Prerequisite: Teacher recommendation and average grades in English 11 Honors or AP/CHS Language and Composition or above-average grades in English 11

This course will prepare students to become independent, self-motivated, life-long learners. This course focuses post-secondary readiness through the close reading and critical analysis of fictional and informational texts.
Oral presentations and writing assignments will highlight the importance of documented research and complex problem solving. Writing assignments will focus on literary analysis and evaluation of rigorous texts. Emphasis will also be placed on having students develop stylistic maturity, through assignments such as the college admissions essay.

Students will complete a graduation project in which they explain their post-secondary goals to a panel of teachers.

Note: This course entitles students to an extra quality point.
Prerequisite: Superior grade in an English 11 course and teacher recommendation The AP Literature and Composition course "focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provoke both meaning and pleasure. As they read, students consider the work's structure, style, 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" (The College Board, AP® English Literature and Composition Course Overview 2019).
The AP English Literature and Composition course aligns to an introductory college-level literature and writing curriculum as well as the Seton Hill University College in High School Course SEL151-Topics in Literature.

Students complete a graduation project and must explain to a panel their post-secondary goals based upon a culmination of research and job exploration experiences. Overall, this course promotes a culture of ongoing and voluntary lifelong learners ready to adapt to ever-changing careers in the $21^{\text {st }}$ century.
Students are encouraged to take the College Board AP Literature and Composition exam that may make them eligible for college credit or register for College in High School (CHS) credits through Seton Hill University (SHU).
This course may require students to complete a summer assignment.

| HS0181 JUNIOR SEMINAR | Grade 11 only |
| :--- | ---: |
| One semester -5 periods credit |  |

This one-semester course is a requirement for all juniors.
In this course, students will be exposed to a variety of career and college pathways as well as the tools to transition into their chosen directions after high school. This class will act as the predecessor to all levels of senior English in that the foundational, exploratory work completed in this course will assist students with their graduation projects during their senior year.

The skills taught in this course are imperative to ensuring that each and every student who graduates has a clear understanding of how to succeed in college, at work, or both. Course curriculum focuses on the $11^{\text {th }}$ grade benchmarks of the Pennsylvania Career Education and Work Academic Standards-Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and Entrepreneurship.

HS0181C CYBER JUNIOR SEMINAR only
One semester - 5 periods

## Grade 11

.5 credit

This one-semester course is a requirement for all juniors.
In this course, students will be exposed to a variety of career and college pathways as well as the tools to transition into their chosen directions after high school. This class will act as the predecessor to all levels of senior English in that the foundational, exploratory work completed in this course will assist students with their graduation projects during their senior year.

The skills taught in this course are imperative to ensuring that each and every student who graduates has a clear understanding of how to succeed in college, at work, or both. Course curriculum focuses on the $11^{\text {th }}$ grade benchmarks of the Pennsylvania Career Education and Work Academic Standards-Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and Entrepreneurship.

## ENGLISH DEPARTMENT ELECTIVES

(These electives DO NOT count as English credits for graduation.)
HS0165 AFRICAN AMERICAN LITERATURE

Grade 9, 10, 11, 12

One semester - 5 periods
This course provides a survey of African American literature from the $18^{\text {th }}$ century to the present. The course will concentrate on some key themes of African American literature and serve as an introduction to key figures in African American Literature. The literature covered in this course will cover the period from African American slavery through the Civil Rights Movement to the present. The course is designed for the serious student who wishes to read and learn about African American Literature and its changing role in American society. The serious academic students interested in African American Literature should consider this course.

HS0176 FILM AS LITERATURE
Grade 9, 10, 11, 12
One semester - 5 periods
.5 credit

Students will examine the narrative form as interpreted through the medium of film. Students will develop verbal and visual analytical skills through watching, discussing, researching, and writing on a variety of films. They will be expected to critique narrative content and form, identify underlying themes, and analyze from a moral standpoint. This is an exciting course meant to open up the world of literature to the film buff and help students truly understand the connection between a great story and a great film.

## HS0175 YOUNG ADULT LITERATURE

Grade 9, 10, 11, 12
One semester - 5 periods
.5 credit

Students will read from a selection of theme-based, young adult literature. Themes will deal with contemporary issues facing today's teens. These issues may include alcohol and drug abuse, societal pressures, dystopia, multiculturalism, problem solving, and self-understanding. The class will attempt to understand what elements make up a "young adult" novel. Some poetry and nonfiction pieces may be incorporated as well. Students can expect to read independently, participate in literature circles, write analyses of reading, and develop projects.

HS0163 PUBLIC SPEAKING
Grade 9, 10, 11, 12
One semester - 5 periods
.5 credit
This course is designed to combine rhetoric with practice. The ultimate goal is effective oral communication complemented by both verbal and non-verbal techniques. Since effective communication requires planning and research, the students will use references available through the school and community sources. Students will conduct the research, prepare their speeches, deliver their presentations, and self-critique their efforts. In addition, both their classmates and the instructor will provide evaluations.

## SOCIAL STUDIES <br> 4 CREDITS REQUIRED FOR GRADUATION

The Social Studies curriculum provides students with a strong background in the historical, governmental, social, economic, political, and cultural basis of life in the United States and the world. Students also receive instruction concerning global issues that affect our world today. This curriculum encourages students to become knowledgeable about their community, regional, national, and global affairs, as well as their roles as American citizens.

## HS0206 CIVICS AND GOVERNMENT

Grade: 9
One year - 5 periods
1 credit

Civics and Government is the required Social Studies course for the ninth grade. This course is designed as an introductory course to acquaint the student with the formation and operation of our United States government, along with the rights and duties of being an American citizen. Federal, state, and local levels of the American political systems are emphasized.

HS0206C CYBER CIVICS AND GOVERNMENT
Grade: 9
One year - 5 periods
1 credit

Civics and Government is the required Social Studies course for the ninth grade. This course is designed as an introductory course to acquaint the student with the formation and operation of our United States government, along with the rights and duties of being an American citizen. Federal, state, and local levels of the American political systems are emphasized.

HS0207 CIVICS AND GOVERNMENT HONORS
One year - 5 periods

Grade: 9
1 credit - Honors weight

## Prerequisite: "A" or "B" grade in $8^{\text {th }}$ grade American History and Teacher Recommendation.

This is an accelerated course designed specifically for students with a special interest in the formation and operation of our U.S. government. While the rights and duties of being an American citizen will be discussed, special emphasis will be placed on the formation and operation of the U.S. government.

Some of the major topics to be addressed will be the following:

- Comparison of democracy and other forms of government
- Analysis of major primary documents such as the Declaration of Independence, Constitution, and Bill of Rights
- Examination of the elements of government organization (executive, legislative, and judicial branches of government on the federal and state levels).
- Study of political parties and elections

HS0207C CYBER CIVICS AND GOVERNMENT HONORS
Grade: 9
One year - 5 periods
1 credit - Honors weight
Prerequisite: "A" or "B" grade in $8^{\text {th }}$ grade American History and Teacher Recommendation.
This is an accelerated course designed specifically for students with a special interest in the formation and operation of our U.S. government. While the rights and duties of being an American citizen will be discussed, special emphasis will be placed on the formation and operation of the U.S. government.

Some of the major topics to be addressed will be the following:

- Comparison of democracy and other forms of government
- Analysis of major primary documents such as the Declaration of Independence, Constitution, and Bill of Rights
- Examination of the elements of government organization (executive, legislative, and judicial branches of government on the federal and state levels).
- Study of political parties and elections


## HS0212 WORLD HISTORY

Grade: 10
One year - 5 periods

## 1 credit

This survey course is the social studies requirement for sophomore year. This course, based upon Pennsylvania State Standards, seeks to expose students to a vast arena of world history, focusing from 1450 until present day. Students will acquaint themselves with their global community through a multi-unit study of the world's major regions and their histories. In each unit, the students will develop an understanding of how other cultures have direct and indirect connections to their own. Students will study global geographies, histories, economics, and daily activities. This knowledge will help students become literate members of today's modern global community.

## HS0212C CYBER WORLD HISTORY

Grade: 10
One year - 5 periods
This survey course is the social studies requirement for sophomore year. This course, based upon Pennsylvania State Standards, seeks to expose students to a vast arena of world history, focusing from 1450 until present day. Students will acquaint themselves with their global community through a multi-unit study of the world's major regions and their histories. In each unit, the students will develop an understanding of how other cultures have direct and indirect connections to their own. Students will study global geographies, histories, economics, and daily activities. This knowledge will help students become literate members of today's modern global community.

HS0240 AP WORLD HISTORY
Full Year - 5 Periods

Grade: 10
1 Credit - AP Weight

Prerequisites: Students must receive a final grade of "A or B" in Honors Civics with teacher recommendation.

This course focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance - focusing on the environment, cultures, statebuilding, economic systems, and social structures - provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.
This is a weighted course.
This is weighted course. (An added value of 1.0 will be added to the quality point average per grade. Example: $\mathrm{A}=5.0, \mathrm{~B}=4.0, \mathrm{C}=3.0$, etc.)

HS0240C CYBER AP WORLD HISTORY Full Year - 5 Periods

Grade: 10
1 Credit - AP Weight
Prerequisites: Students must receive a final grade of "A or B" in Honors Civics with teacher recommendation.

This course focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance - focusing on the environment, cultures, statebuilding, economic systems, and social structures - provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.
This is a weighted course.
This is weighted course. (An added value of 1.0 will be added to the quality point average per grade. Example: $\mathrm{A}=5.0, \mathrm{~B}=4.0, \mathrm{C}=3.0$, etc.)

HS0220 UNITED STATES HISTORY
One year - 5 periods

Grade: 11
1 credit

This course is designed to give the means to understand the historical and social forces that have shaped them as Americans from 1850 through present day. This course focuses on leaning historical content knowledge, the understanding of why events occur through the use of cause and effect relationships, and the development of critical thinking skills. Among the specific topics covered are political and economic aspects of American history, the importance of geography, multi-cultural aspects of American history, and the growth and development of science and technology in American history.

HS0220C CYBER UNITED STATES HISTORY
One year - 5 periods

Grade: 11
1 credit

This course is designed to give the means to understand the historical and social forces that have shaped them as Americans from 1850 through present day. This course focuses on leaning historical content knowledge, the understanding of why events occur through the use of cause and effect relationships, and the development of critical thinking skills. Among the specific topics covered are political and economic aspects of American history, the importance of geography, multi-cultural aspects of American history, and the growth and development of science and technology in American history.

HS0222 CHS/AP UNITED STATES HISTORY
One Year - 5 Periods
La Roche University Scholars Program Eligible - Earn up to 6 College Credits
Prerequisites: Students must receive a final grade of "A or B" in World History with teacher recommendation.

AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance - identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.
This is weighted course. (An added value of 1.0 will be added to the quality point average per grade. Example: $\mathrm{A}=5.0, \mathrm{~B}=4.0, \mathrm{C}=3.0$, etc.)
Students in this course have the opportunity to earn college credit for a reduced fee through the Scholars Program at La Roche.

HS0232 SOCIOLOGY
One year - 5 periods
Grade: 12
1 credit

Sociology is one of the twelfth-grade courses that satisfies the Social Studies requirement. This course focuses on the key concepts and principles of Sociology. Students are asked to explain social structure of America and other countries. Students are asked to analyze the relationship between people and their environment. This course also asks students to critically analyze their role in society.

HS0232C CYBER SOCIOLOGY
One year - 5 periods

Grade: 12
1 credit

Sociology is one of the twelfth-grade courses that satisfies the Social Studies requirement. This course focuses on the key concepts and principles of Sociology. Students are asked to explain social structure of America and other countries. Students are asked to analyze the relationship between people and their environment. This course also asks students to critically analyze their role in society.

HS0227 ECONOMICS
One year - 5 periods

## Grade: 12

1 credit
Economics is a senior course that satisfies the Social Studies requirement. It blends a study major economic concepts with many other themes of Social Studies. Structures of the economy are emphasized. Concepts such as supply and demand and business structures are covered. An emphasis is placed on understanding both domestic economic systems and global economic systems. Students should realize their roles and responsibilities in a capitalist economy.

## HS0233 PSYCHOLOGY

Grade: 12
One year - 5 periods 1 credit Psychology is one of the twelfth-grade courses that satisfies the Social Studies requirement. This course focuses on the major concepts and theories found in introductory Psychology. Students will learn scientific methods used in Psychology. Students will also gain knowledge of the possible careers that exist in Psychology. Students will also gain an insight into the history of Psychology and the new practices and ideas of Psychology.

## HS0233C CYBER PSYCHOLOGY

Grade: 12
One year - 5 periods
1 credit
Psychology is one of the twelfth-grade courses that satisfies the Social Studies requirement. This course focuses on the major concepts and theories found in introductory Psychology. Students will learn scientific methods used in Psychology. Students will also gain knowledge of the possible careers that exist in Psychology. Students will also gain an insight into the history of Psychology and the new practices and ideas of Psychology.

HS0234 CHS/AP PSYCHOLOGY
Grade: 12
One year - 5 periods 1 credit-AP weight
La Roche University Scholars Program Eligible - Earn up to 3 College Credits
Prerequisites: Students must receive a final grade of "A or B" in AP or United States History with teacher recommendation.

Advanced Placement Psychology is an advanced introduction to Psychology course. With a heavy emphasis on reading, writing, and critical thinking, this course is designed for those students with a solid background in these areas. Advanced Psychology will be a fast paced, higher level social studies class which will satisfy the Social Study requirement in the senior year. The comparing and contrasting of modern and historical psychological theory will be the core of the curriculum. Students will be required to write a number of college style papers, and to debate controversial psychological topics. In addition, sensory and perceptual processes of the human being will be studied.

This is weighted course. (An added value of 1.0 will be added to the quality point average per grade. Example : $\mathrm{A}=5.0, \mathrm{~B}=4.0, \mathrm{C}=3.0$, etc.)

Students in this course have the opportunity to earn college credit for a reduced fee through the Scholars Program at La Roche.

## SOCIAL STUDIES DEPARTMENT ELECTIVES (These electives DO NOT count as Social Studies credits for graduation.)

## HS0235 CRIMINAL JUSTICE

Grade 10,11,12
One semester - 5 periods
.5 credit
Criminal Justice is a half-year elective course that can be taken by any junior or senior who has passed Civics and Government. The course focuses on the understanding of the criminal justice system of the United States and how it works in today's society. Many people have a negative image of how our justice system works. They believe that it is filled with corrupt police and officials, biased judges and a congested legal process. Many people with this view do not have a good understanding of our justice system.
This class is an elective credit and does not meet the Social Studies graduation requirement.
HS0235C CYBER CRIMINAL JUSTICE
Grade 10,11,12
One semester -5 periods .5 credit
Criminal Justice is a half-year elective course that can be taken by any junior or senior who has passed Civics and Government. The course focuses on the understanding of the criminal justice system of the United States and how it works in today's society. Many people have a negative image of how our justice system works. They believe that it is filled with corrupt police and officials, biased judges and a congested legal process. Many people with this view do not have a good understanding of our justice system.
This class is an elective credit and does not meet the Social Studies graduation requirement

## HS0230 WORLD GEOGRAPHY

Grade 9,10,11,12
One Semester - 5 Days
. 5 Credit
This elective half-year course is designed using Pennsylvania and National Standards as a survey course that will expose students to the physical, political and cultural geographies of the world. It will enable students to answer the question of "Where would I find that again?" Students will review basic map skills while being exposed to cultures from around the world. This interdisciplinary approach will incorporate aspects of physical science, sociology, anthropology, economics and history in a class that is designed to be project-based. Insights will be gained into relationships among people and places and students learn significant facts about the world in which they live.
This is an elective course and does not meet the social studies graduation requirement.
HS0230C CYBER WORLD GEOGRAPHY
Grade 9,10,11,12
One Semester - 5 Days
. 5 Credit
This elective half-year course is designed using Pennsylvania and National Standards as a survey course that will expose students to the physical, political and cultural geographies of the world. It will enable students to answer the question of "Where would I find that again?" Students will review basic map skills while being exposed to cultures from around the world. This interdisciplinary approach will incorporate aspects of physical science, sociology, anthropology,
economics, and history in a class that is designed to be project-based. Insights will be gained into relationships among people and places and students learn significant facts about the world in which they live.
This is an elective course and does not meet the social studies graduation requirement.
HS0236 CULTURAL MYTHOLOGY \& FOLKLORE
Grade 9,10,11,12
One semester - 5 Days
People have always tried to understand why things happened. In a time before scientific answers, people were imaginative enough to explain their world through gods, legends, and magic. Students will examine the nature of myths, as well as their social functions. They will see how myths were developed to describe historical events, explain how the world functioned, and serve as lessons for culturally accepted behavior. A variety of folklore and legends will be examined; these tales will include classical mythology of Greece and Rome, as well as myths of Native Americans, Norse, Celts, Africans, Japanese and more. Studying mythology from a cultural approach, students will be able to identify common themes, characters, and philosophies as they explore the role these stories played in how cultures developed. They will also see the connection between myths and today's society.
This is an elective course and does not meet the social studies graduation requirement.

HS0242 AP COMPARATIVE GOVERNMENT AND POLITICS One Semester - 5 periods

Grade 9,10,11,12
. 5 credit- AP weight

Prerequisites: Students must receive a final grade of "A or B" in current social studies course with teacher recommendation.

This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. Students compare and contrast political institutions and processes across six countries and analyze and interpret data to derive generalizations. Topics include: Introduction to Comparative Politics; Sovereignty, Authority, and Power; Political Institutions; Citizens, Society, and the State; Political and Economic Change; Public Policy. The emphasis should be on broad trends that allow comparison, rather than on details that are unrelated to larger trends and concepts. This class is an elective credit and does not meet the Social Studies graduation requirement. This is a weighted course.

HS0247 UNDERSTANDING THE CRIMINAL MIND One Semester - 5 Days

Grade 11,12 . 5 Credit

This elective half-year course is a hybrid study using elements of criminal justice and psychology. Throughout the course, students will seek to answer the question of what motivates some people to commit horrible and criminal acts? Students will attack this question through analysis rooted in psychological, sociological, biological, and environmental perspectives. The
course will also examine how the criminal justice system must balance understanding and consequences. This is an elective course and does not meet the social studies graduation requirement.

HS0248 ANCIENT AND CLASSICAL WORLD HISTORY One Semester-5 periods

Grades 9,10,11,12
. 5 Credit

Ancient and Classical World History is a one semester course that will examine the Ancient Greeks, Romans, Egyptians, Mesopotamians, and more. The course focus is to provide historical and cultural information about Ancient societies starting with the Cradles of Civilization and finishing with era prior to the Medieval world. This deeper exploration elective allows students to explore the lives, beliefs, architecture, cultures, and wars of early civilizations that are not part of the high school world history curriculum. This class is an elective credit and does not meet the Social Studies graduation requirement.

## HS0248C CYBER ANCIENT AND CLASSICAL WORLD HISTORY

Grades 9,10,11,12
One Semester-5 periods
. 5 Credit
Ancient and Classical World History is a one semester course that will examine the Ancient Greeks, Romans, Egyptians, Mesopotamians, and more. The course focus is to provide historical and cultural information about Ancient societies starting with the Cradles of Civilization and finishing with era prior to the Medieval world. This deeper exploration elective allows students to explore the lives, beliefs, architecture, cultures, and wars of early civilizations that are not part of the high school world history curriculum. This class is an elective credit and does not meet the Social Studies graduation requirement.

HS0249 MOCK TRIAL
One Semester - 5 Periods (Fall Only)

Grades 10,11,12
. 5 Credit

This one semester course is a simulation-based class that explores how trials actually work in the modern legal system. Students will actively learn about the legal system by preparing a case for presentation in court while working on public speaking and research skills. Participation in the course helps students develop skills that are vital in post-secondary education and career fields both in and outside of legal studies. Students in this course may have the opportunity to compete at the Allegheny County Mock Trial Tournament at the end of the semester.
This class is an elective credit and does not meet the Social Studies graduation requirement.

HS0250 HISTORY THROUGH FILM
Grades $\mathbf{9 , 1 0 , 1 1 , 1 2}$
One Semester - 5 Periods

A one semester elective course that will use movies to examine multiple perspectives in history. Students will also view and analyze primary and secondary sources to evaluate accuracy in popular films.
This class is an elective credit and does not meet the Social Studies graduation requirement.

A one semester elective course that will use movies to examine multiple perspectives in history. Students will also view and analyze primary and secondary sources to evaluate accuracy in popular films.
This class is an elective credit and does not meet the Social Studies graduation requirement.

## HS0251 CURRENT EVENTS

Grades 9,10,11,12
One Semester - 5 Periods

This discussion-based elective will examine current issues of the modern day using local, national and global news. The focus of the class is to raise awareness of the world around us, but to also be able to identify bias in news reporting. The class will follow political, social, and economic issues. Once a week the class will examine the historic causes of these news events. Students will leave the class with a stronger understanding of the relationship between current events and history and the foundation of basic skills to have constructive civil discourse. This class is an elective credit and does not meet the Social Studies graduation requirement.

HS0251C CYBER CURRENT EVENTS
Grades 9,10,11,12
One Semester - 5 Periods
. 5 Credit
This discussion-based elective will examine current issues of the modern day using local, national and global news. The focus of the class is to raise awareness of the world around us, but to also be able to identify bias in news reporting. The class will follow political, social, and economic issues. Once a week the class will examine the historic causes of these news events. Students will leave the class with a stronger understanding of the relationship between current events and history and the foundation of basic skills to have constructive civil discourse. This class is an elective credit and does not meet the Social Studies graduation requirement.

| HS0241 EUROPEAN HISTORY | Grades $\mathbf{9 , 1 0 , 1 1 , 1 2}$ |
| :--- | ---: |
| One Semester - 5 Periods | $\mathbf{5}$ Credit |

This one semester elective course is designed to focus on one of the most influential continents of the world, Europe. Students will take a more in-depth focus on how Europe's global influence developed starting with the Fall of the Roman Empire, through the Dark Ages, the concept of chivalry, feudalism, and knights. It will address the Black Plague and the changing of countries into the modern governments that they will eventually become. The course will continue to look at the European continent through the French Revolution

International relations will examine how countries interact with each other during times of peace and during conflict (war, civil war, terrorism). It will examine how countries analyze and prepare for rivals and friends within the world. The class will also examine how countries predict behavior of other countries through previous historical events. The course will comprise of reviewing the historical events of the $20^{\text {th }}$ century and analyzing them through the lens of international relations. The course will also analyze non-violent/aggressive interactions of countries in the post-Cold War world. This would cover sanctions, trade negotiation, and international issues. These international issues could be common problems like ocean rights, natural resources, pollution, hunger, and environmental issues like deforestation, global warming, etc.

# MATHEMATICS <br> 3 CREDITS REQUIRED FOR GRADUATION 

The Mathematics department of The West Mifflin Senior High School seeks to empower our students with the abilities and motivation to become life-long learners and users of mathematics. It is our goal to instill in our students an appreciation of mathematics as a tool to be used in everyday life. Toward these ends, we will employ proven teaching methodologies and up to date technologies such as graphing calculators and computer-based learning. A thorough understanding of mathematics can prepare students for an ever-increasing range of careers and opportunities.

HS0336 PRE-ALGEBRA Grade 9
One year - 5 periods 1 credit
Prerequisites: Teacher recommendation and/or having earned a final grade of D or F in Math 8.

This course is recommended for the $9^{\text {th }}$ grade student who has scored a D or F in Math 8 . This course is intended to begin the students' journey into Algebra I. It is designed to cover fundamentals of algebra I thru linear equations. Upon successful completion of this course, the student will be ready for Algebra I the following year.

HS0336C CYBER PRE-ALGEBRA Grade 9
One year -5 periods 1 credit
Prerequisites: Teacher recommendation and/or having earned a final grade of $D$ or $F$ in Math 8.

This course is recommended for the $9^{\text {th }}$ grade student who has scored a D or F in Math 8 . This course is intended to begin the students' journey into Algebra I. It is designed to cover fundamentals of algebra I thru linear equations. Upon successful completion of this course, the student will be ready for Algebra I the following year.

## HS0343 ALGEBRA I

Grade 9, 10, 11
1 credit
One year - 5 periods
Prerequisites: Teacher recommendation and a final grade of an A, B, or C in Math 8 or students who did not pass Algebra I at the $8^{\text {th }}$ grade level with a $C$ or better based on test scores and placement test, or did not score above 1480 on the keystone Algebra I test. Also for the $10^{\text {th }} / 1^{\text {th }}$ grade student who passed Pre-Algebra.

This course is offered for students in ninth grade who passed Math 8 with an A, B or C+, or algebra I with a B, C, or D average but did not pass the keystone exam with a score of 1480 or above, or the $10^{\text {th }} / 11^{\text {th }}$ grade student who passed pre-algebra. The fundamental rules of algebra are presented in this course. Properties of the real numbers, operations with rational expressions, linear equations, elementary factoring, simple quadratics, verbal problems, and applications are some of the topics covered. The keystone exam will be administered at the end of this course.

Prerequisites: Teacher recommendation and a final grade of an A, B, or C in Math 8 or students who did not pass Algebra I at the $8^{\text {th }}$ grade level with a $C$ or better based on test scores and placement test, or did not score above 1480 on the keystone Algebra I test. Also for the $10^{\text {th }} / 11^{\text {th }}$ grade student who passed Pre-Algebra.

This course is offered for students in ninth grade who passed Math 8 with an A, B or C+, or algebra I with a B, C, or D average but did not pass the keystone exam with a score of 1480 or above, or the $10^{\text {th }} / 11^{\text {th }}$ grade student who passed pre-algebra. The fundamental rules of algebra are presented in this course. Properties of the real numbers, operations with rational expressions, linear equations, elementary factoring, simple quadratics, verbal problems, and applications are some of the topics covered. The keystone exam will be administered at the end of this course.

HS0346 ALGEBRA II
Grade 10,11,12
One year - 5 periods 1 credit
Prerequisites: Students that have passed Geometry with a C or D.
This course is designed for the student who has completed Algebra I with a C or D , or Algebra II with a C or D and has not passed the PA state Keystone exam. This course will cover topics including quadratic equations, logarithms, factoring, and radical expressions. Applications will be strongly enforced with these topics.

HS0346C CYBER ALGEBRA II
Grade 10,11,12
One year - 5 periods
1 credit
Prerequisites: Students that have passed Geometry with a C or D.
This course is designed for the student who has completed Algebra I with a C or D, or Algebra II with a C or D and has not passed the PA state Keystone exam. This course will cover topics including quadratic equations, logarithms, factoring, and radical expressions. Applications will be strongly enforced with these topics.

HS0342 HONORS ALGEBRA II
One year - 5 periods
Prerequisites: Teacher recommendation. This course is restricted to ninth grade students earning a final grade of at least $C$ in Geometry in 8th Grade based on test scores and placement test. These students must have passed the Keystone Algebra I exam.

This course is designed for the ninth grade above average mathematics student. It will be taught at an accelerated pace with more rigor and depth, and will cover more topics than the traditional Algebra II course. It includes but is not limited to linear, quadratic, and exponential and log equations, systems of equations and inequalities, rational exponents, algebraic fractions, complex numbers, radical expressions and probability.

Prerequisites: Teacher recommendation. This course is restricted to ninth grade students earning a final grade of at least $C$ in Geometry in 8th Grade based on test scores and placement test. These students must have passed the Keystone Algebra I exam.

This course is designed for the ninth grade above average mathematics student. It will be taught at an accelerated pace with more rigor and depth, and will cover more topics than the traditional Algebra II course. It includes but is not limited to linear, quadratic, and exponential and log equations, systems of equations and inequalities, rational exponents, algebraic fractions, complex numbers, radical expressions and probability.

HS0390 COLLEGE ALGEBRA (CHS)
Grades 10, 11, 12
One year - 5 periods
1 credit
Prerequisites: Teacher recommendation and a final grade of at least a "C" in Algebra II.
This course is one that follows the curriculum of a college freshman mathematics course. It is designed for those students who have successfully completed the courses of Algebra I, Algebra II and Geometry. It is also recommended to those students that may need to reinforce their algebra skills while or before taking Pre-Calculus and Trigonometry or Calculus. This course is also recommended for college-bound students not planning on being a math or science major. *Scholar Credit Eligible (pending)

HS0348 GEOMETRY
Grade 10, 11, 12
One year - 5 periods
1 credit
Prerequisites: tenth, eleventh grade students who have completed Algebra 1 with a C or D
This course is a basic and elementary Geometry course taught with a less formal approach with emphasis on Geometry topics. The course will include practical applications of basic theorems dealing with length, angles, triangles, constructions, areas, volumes, circles, polygons, right triangle trigonometry, indirect measuring, simple probability of outcome problems, and basic statistical concepts of measures of central tendencies. The course will be kept at an informal and fundamental level and include some hands-on activities.

## HS0348C CYBER GEOMETRY

One year - 5 periods
Grade 10, 11, 12
1 credit
Prerequisites: tenth, eleventh grade students who have completed Algebra 1 with a C or D
This course is a basic and elementary Geometry course taught with a less formal approach with emphasis on Geometry topics. The course will include practical applications of basic theorems dealing with length, angles, triangles, constructions, areas, volumes, circles, polygons, right triangle trigonometry, indirect measuring, simple probability of outcome problems, and basic statistical concepts of measures of central tendencies. The course will be kept at an informal and fundamental level and include some hands-on activities.

Prerequisites: Teacher recommendation and a final grade of at least C in Algebra 1 (for $10^{\text {th }}$ grade) or Algebra II (for $11^{\text {th }}$ grade).

This is the traditional Geometry course offered for tenth, eleventh and twelfth grade students. Theorems involving triangles, parallel lines and polygons, congruence, similarities, circles and ratios are discussed. Any student considering college admissions should enroll in this course. This course is also offered for any $9^{\text {th }}$ grader that did not pass geometry in $8^{\text {th }}$ grade

## HS0305C CYBER ACADEMIC GEOMETRY

Grade 9, 10, 11
. One year - 5 periods
1 credit
Prerequisites: Teacher recommendation and a final grade of at least C in Algebra 1 (for $10^{\text {th }}$ grade) or Algebra II (for $11^{\text {th }}$ grade).

This is the traditional Geometry course offered for tenth, eleventh and twelfth grade students. Theorems involving triangles, parallel lines and polygons, congruence, similarities, circles and ratios are discussed. Any student considering college admissions should enroll in this course. This course is also offered for any $9^{\text {th }}$ grader that did not pass geometry in $8^{\text {th }}$ grade

HS0330 WORKFORCE MATH
One year - 5 periods

Grades 11, 12
1 credit

## Prerequisites: Completion of Algebra 1 and Geometry

The course is an application-based learning approach incorporating Algebra I and Geometry topics. The course encourages students to be actively involved in applying mathematical ideas to their everyday lives. The course will focus on the stock market, modeling a business, banking, consumer credit, automobile ownership, employment basics, income taxes, independent living, and planning for retirement.

## Grades 11, 12

One year - 5 periods

## 1 credit

## Prerequisites: Completion of Algebra 1 and Geometry

The course is an application-based learning approach incorporating Algebra I and Geometry topics. The course encourages students to be actively involved in applying mathematical ideas to their everyday lives. The course will focus on the stock market, modeling a business, banking, consumer credit, automobile ownership, employment basics, income taxes, independent living, and planning for retirement.

Prerequisites: Teacher recommendation and a final grade of at least B in geometry, or passing grade in Algebra III.
This course is offered for eleventh and twelfth grade students. The Trigonometry part of this course includes traditional topics such as trigonometric functions, acute angles and right triangles, radian measures, graphing various functions, identities and trigonometric equations. In the Pre-Calculus section, much emphasis is placed on all types of functions, graphing, and functional behavior. Polynomial, rational, exponential, and logarithmic functions will be discussed and analyzed in detail. Additional topics will include conic sections and vector analysis.

HS0355C CYBER PRE-CALCULUS AND TRIGONOMETRY Grade 11, 12
One year - 5 periods
1 credit
Prerequisites: Teacher recommendation and a final grade of at least $B$ in geometry, or passing grade in Algebra III.

This course is offered for eleventh and twelfth grade students. The Trigonometry part of this course includes traditional topics such as trigonometric functions, acute angles and right triangles, radian measures, graphing various functions, identities and trigonometric equations. In the Pre-Calculus section, much emphasis is placed on all types of functions, graphing, and functional behavior. Polynomial, rational, exponential, and logarithmic functions will be discussed and analyzed in detail. Additional topics will include conic sections and vector analysis.

HS0356 HONORS PRE-CALCULUS AND TRIGONOMETRY
Grade 10
One year - 5 periods 1 credit - Honors weight
Prerequisites: Teacher recommendation. Restricted to tenth grade students earning a final grade of at least B in $\mathbf{9}^{\text {th }}$ grade honors algebra II.

This weighted course is designed for the accelerated math student and is limited to $10^{\text {th }}$ grade math students only. It covers all the same topics that the Pre-calculus and Trigonometry class covers, as well as additional topics, such as nonlinear systems of equalities, partial fractions, and matrices. As an accelerated and weighted class, the student can expect more rigor and depth in this course.

HS0356C CYBER HONORS PRE-CALCULUS AND TRIGONOMETRY
Grade 10
One year - 5 periods
1 credit - Honors weight
Prerequisites: Teacher recommendation. Restricted to tenth grade students earning a final grade of at least $\mathbf{B}$ in $9^{\text {th }}$ grade honors algebra II.

This weighted course is designed for the accelerated math student and is limited to $10^{\text {th }}$ grade math students only. It covers all the same topics that the Pre-calculus and Trigonometry class covers, as well as additional topics, such as nonlinear systems of equalities, partial fractions, and matrices. As an accelerated and weighted class, the student can expect more rigor and depth in this course.

Grade 11, 12
One year - 5 periods
1 credit - AP weight
Prerequisites: Teacher recommendation and a final grade of at least $\mathbf{C}$ in Pre-Calculus and Trigonometry.

This course is designed for the exceptional eleventh or twelfth grade mathematics student. This is a rigorous course in which many topics of a normal first year college calculus course are studied. In the first semester, functions are thoroughly studied by strictly adhering to function notation. Limits, derivatives, applications of derivatives, and integration are also discussed. During the second semester, methods of anti-differentiation are studied as well as transcendental functions, differential equations, and applications of derivatives. The students in this class are expected to take the AP Calculus AB exam.

HS0374 CHS/AP CALCULUS BC (B)
Grade 12
One year - 5 periods
1 credit - AP weight
Prerequisites: Teacher recommendation and a final grade of at least $B$ in Calculus.
This course is designed for the exceptional twelfth grade mathematics student. This course is intended for students who have a thorough knowledge of college preparatory mathematics, including Algebra II, Geometry, Trigonometry, (rectangular and polar coordinates, equations and graphs, lines and conics). AP Calculus is a continuation of Calculus and is equivalent to a college level Calculus II course. AP Calculus begins with a review of the topics learned in Calculus and then covers techniques of integration, sequences, series, polar functions, and vectors. The students in this class are expected to take the AP Calculus BC exam.

HS0384 CHS/AP PROBABILITY AND STATISTICS One year - 5 periods

Grade 11,12
Prerequisites: At least a C in Trig or passing in Algebra III, must have completed Algebra II and Geometry and teacher recommendation

This is an advanced math elective course. It is designed for the 12th-grade student who has a thorough knowledge of Algebra III, Statistics, Pre-Calculus/trig or Calculus. This course teaches methods and terminologies of descriptive and inferential statistics. Students who complete this course will be able to conduct their own analyses of standard one-sample or two-sample data sets, follow statistical reasoning, read statistical reports with understanding and probability theory. Introductory topics in linear regression, analysis of variance and contingency table analysis will also be covered. The course is designed to coincide with what a typical collegelevel Introduction to Probability and Statistics class will cover. Students are expected to take the corresponding AP Examination early in May.

Science courses in the West Mifflin Area High School are designed to help students develop an understanding of science as a human activity in which we strive to explain the natural world. Scientific explanation is based upon experimentation and laboratory work.

The course work and activities provide students with extensive laboratory activities based on the skills of observation, prediction, interpretation and analysis of data. Activities allow for a "hands on, minds on" understanding of scientific principles.

Students will progressively develop critical thinking skills as they progress through the curriculum. They will discover the relationships between scientific fields of inquiry and their underlying common principles. Students will experience the relationship between science and technology. They will explore the impact that scientific thought and discoveries have on society and how science is used to serve society.

We live in an advanced technological society. Every student needs to have an expanded understanding of science and technology. All students are encouraged to enroll in as many science courses as their schedule and personal interests allow. Course descriptions are organized by grade in order from ninth to twelfth grades.

All ninth-graders will take Biology. Students and parents should read the following descriptions to determine which pathway best meets the student's academic needs and career plans. The Pennsylvania Biology Keystone Exam will be administered at the end of the course.

## HS0418 BIOLOGY

Grade 9
5 periods 1 credit
The principles and concepts that apply to life at all levels are presented throughout Biology to challenge students to think critically about the world in which they live. Students will be introduced to biological theories, vocabulary, and laboratory practices through discussions, investigations, demonstrations, and small and large-group activities. Students will be prepared for the rigorous Biology Keystone Exam by investigating topics that include cell structure and function, cell division, genetics, evolution, and ecology

HS0418C CYBER BIOLOGY
5 periods

## Grade 9

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The principles and concepts that apply to life at all levels are presented throughout Biology to challenge students to think critically about the world in which they live. Students will be introduced to biological theories, vocabulary, and laboratory practices through discussions,
investigations, demonstrations, and small and large-group activities. Students will be prepared for the rigorous Biology Keystone Exam by investigating topics that include cell structure and function, cell division, genetics, evolution, and ecology.

HS0415 HONORS BIOLOGY
5 periods + lab period on alternate days
Grade 9
1.5 credits - Honors Weight

## Prerequisites: "A or B" in $8^{\text {th }}$ grade Science and "A or B" in Algebra or Geometry

Honors Biology is a course with extended time for labs designed to teach the basic laws and principles of biology. It is very similar to Biology but with the extra class time, students are able to dive more deeply into the content. Students will be prepared for the rigorous Biology Keystone Exam by investigating topics that include cell structure and function, cell division, genetics, evolution, and ecology. Students will be guided along the course of study to develop critical thinking and problem solving through scientific inquiry.

HS0415C CYBER HONORS BIOLOGY 5 periods + lab period on alternate days

Grade 9
1.5 credits - Honors Weight

## Prerequisites: "A or B" in $8^{\text {th }}$ grade Science and "A or B" in Algebra or Geometry

Honors Biology is a course with extended time for labs designed to teach the basic laws and principles of biology. It is very similar to Biology but with the extra class time, students are able to dive more deeply into the content. Students will be prepared for the rigorous Biology Keystone Exam by investigating topics that include cell structure and function, cell division, genetics, evolution, and ecology. Students will be guided along the course of study to develop critical thinking and problem solving through scientific inquiry.

HS0425 CHEMISTRY
Grade 10
5 periods
1 credit
This course is designed to help students discover the world of chemistry. Through experimentation, problem solving and other class activities, students will develop a clear understanding of basic chemistry. This basic understanding will include such things as the nature of matter, solutions, acids and bases, salts, and chemical reactions. This knowledge will be applied to the real world so that students can see how chemistry affects their everyday life. The math required for this course will be minimal. The course is not designed for students considering a career in engineering, mathematics, or any science related field or profession. Students must have passed Biology to take this course.

This course is designed to help students discover the world of chemistry. Through experimentation, problem solving and other class activities, students will develop a clear understanding of basic chemistry. This basic understanding will include such things as the nature of matter, solutions, acids and bases, salts, and chemical reactions. This knowledge will be applied to the real world so that students can see how chemistry affects their everyday life. The math required for this course will be minimal. The course is not designed for students considering a career in engineering, mathematics, or any science related field or profession. Students must have passed Biology to take this course.

HS0429 ACADEMIC CHEMISTRY
Grade 10
5 periods + lab period on alternate days
1.5 credits

## Prerequisites: "A, B or C" in Algebra and <br> "A or $B$ " in Honors Biology or an "A" in Biology

Academic Chemistry introduces the basic theories and concepts of the science of chemistry. It is recommended for college-bound students not interested in science related careers. Throughout the course, emphasis will be placed on developing the skills of critical thinking and problem solving. Algebra level math skills are expected and used regularly.

## HS0429C CYBER ACADEMIC CHEMISTRY

Grade 10
5 periods + lab period on alternate days
1.5 credits

## Prerequisites: "A, B or C" in Algebra and

"A or B" in Honors Biology or an "A" in Biology
Academic Chemistry introduces the basic theories and concepts of the science of chemistry. It is recommended for college-bound students not interested in science related careers. Throughout the course, emphasis will be placed on developing the skills of critical thinking and problem solving. Algebra level math skills are expected and used regularly.

HS0427 HONORS CHEMISTRY
5 periods + lab period on alternate days
Grade 10
1.5 credits - Honors Weight

## Prerequisites: "A or B" in Algebra and

"A or B" in Honors Biology or "A" in Biology (with teacher recommendation)
Honors Chemistry introduces the basic theories and concepts of the science of chemistry. It is recommended for college-bound students. Throughout the course, emphasis will be placed on developing the skills of critical thinking and problem solving. Upper level math skills are expected and used regularly. This course is appropriate for advanced college-bound students who intend to major in science, medicine, engineering, or related technical professional fields. All juniors will take Physics. Students and parents should read the following descriptions to determine which pathway best meets the student's academic needs and career plans. Juniors
may also take CHS and elective courses in addition to one of the courses listed on this page.

HS0427C CYBER HONORS CHEMISTRY
5 periods + lab period on alternate days

Grade 10
1.5 credits - Honors Weight

## Prerequisites: "A or B" in Algebra and <br> "A or B" in Honors Biology or "A" in Biology (with teacher recommendation)

Honors Chemistry introduces the basic theories and concepts of the science of chemistry. It is recommended for college-bound students. Throughout the course, emphasis will be placed on developing the skills of critical thinking and problem solving. Upper level math skills are expected and used regularly. This course is appropriate for advanced college-bound students who intend to major in science, medicine, engineering, or related technical professional fields.

All juniors will take Physics. Students and parents should read the following descriptions to determine which pathway best meets the student's academic needs and career plans. Juniors may also take CHS and elective courses in addition to one of the courses listed on this page.
HS0433 PHYSICAL SCIENCE

Grade 11
5 periods 1 credit
Physical Science focuses on topics in the fields of chemistry and physics. The emphasis of this course is on the application of physics and chemistry principles to everyday life with some mathematical and theoretical applications to reinforce concepts that are discussed. Students will apply the scientific principles they learn in this course to help them make decisions related to science in their life outside of school. Course topics include but are not limited to qualities of matter, mechanics, work and machines, sound and light.

Physical Science focuses on topics in the fields of chemistry and physics. The emphasis of this course is on the application of physics and chemistry principles to everyday life with some mathematical and theoretical applications to reinforce concepts that are discussed. Students will apply the scientific principles they learn in this course to help them make decisions related to science in their life outside of school. Course topics include but are not limited to qualities of matter, mechanics, work and machines, sound and light.

## HS0437 PHYSICS

5 periods + lab period on alternate days

Grade 11
1.5 credits

## Prerequisites: "A, B, or C" in Honors Chemistry or Academic Chemistry or " $A$ " in Chemistry with teacher recommendation and "A or B" in Algebra II or Geometry

This course is designed so that the student will, through participation in experiments, problem solving, and other class activities, develop a clear understanding of the concepts of physics. It enables the student to take these basic concepts and use them to understand events in everyday life as well as more complex physical phenomena. This course has been planned with the average student in mind. It would be essential to anyone planning a technical career and highly beneficial to anyone living in our technical society. (This course is not for students planning a career in engineering.)

HS0437C CYBER PHYSICS
5 periods + lab period on alternate days

## Grade 11

1.5 credits

Prerequisites: "A, B, or C" in Honors Chemistry or Academic Chemistry or
"A" in Chemistry with teacher recommendation and
"A or B" in Algebra II or Geometry
This course is designed so that the student will, through participation in experiments, problem solving, and other class activities, develop a clear understanding of the concepts of physics. It enables the student to take these basic concepts and use them to understand events in everyday life as well as more complex physical phenomena. This course has been planned with the average student in mind. It would be essential to anyone planning a technical career and highly beneficial to anyone living in our technical society. (This course is not for students planning a career in engineering.)

HS0439 HONORS PHYSICS
5 periods + lab period on alternate days

Grade 11
1.5 credits - Honors Weight

## Prerequisites: "A or B" in Biology and Chemistry and

"A or B" in Algebra II and Trigonometry (can be concurrently enrolled in Trig)
This course is designed to help the students develop the ability to reason and problem solve. Students will have the opportunity to develop hypotheses and evaluate theories related to basic physics principles. Using logic, reason and knowledge of basic physics concepts, students will explain various phenomena from the world around them. This course would be especially useful for anyone considering a career in science, mathematics, engineering or health sciences. Many of the theories and concepts discussed in this class will be reaffirmed through hands-on laboratory activities.

Seniors taking additional sciences may choose from CHS Physics, CHS Chemistry, CHS Biology, Academic Physics or Academic Chemistry, or semester electives. Three years of science are required for graduation; electives cannot take place of third year science requirement.

Prerequisites: "A or B" in Biology and Chemistry and
"A or B" in Algebra II and Trigonometry (can be concurrently enrolled in Trig)
This course is designed to help the students develop the ability to reason and problem solve. Students will have the opportunity to develop hypotheses and evaluate theories related to basic physics principles. Using logic, reason and knowledge of basic physics concepts, students will explain various phenomena from the world around them. This course would be especially useful for anyone considering a career in science, mathematics, engineering or health sciences. Many of the theories and concepts discussed in this class will be reaffirmed through hands-on laboratory activities.
Seniors taking additional sciences may choose from CHS Physics, CHS Chemistry, CHS Biology, Academic Physics or Academic Chemistry, or semester electives. Three years of science are required for graduation; electives cannot take place of third year science requirement.

HS0424 COLLEGE IN HIGH SCHOOL (CHS) CHEMISTRY Grades 11, 12 5 periods + lab period on alternate days 1.5 credits - AP weight

Prerequisites: "A or B" in Honors Chemistry and "A or B" in Algebra II Student must be enrolled in Honors or Academic Physics

This course is a college General Chemistry I course offered through the University of Pittsburgh's College in High School program. Topics covered include atomic theory, molarity, gases and kinetic theory, thermochemistry, electronic structure and the periodic table, relationships between phases, ionic solution, redox reactions, and thermochemistry. Problem solving and laboratory experiences are key components of this course. Five laboratory experiments will be performed at Pitt's Department of Chemistry facilities. Students will take three university-prepared exams, as well as a comprehensive final exam taken at the University. Students who successfully complete the CHS Chemistry course will receive four credits from the University of Pittsburgh. There is a fee of $\$ 348$ for this course and financial aid is available. Students intending to pursue careers in Science, Engineering, or Medicine-related fields should enroll in this course.

HS0422 COLLEGE IN HIGH SCHOOL (CHS) BIOLOGY
Grades 11, 12
5 periods + lab period on alternate days $\quad 1.5$ credits - AP Weight Prerequisites: "A or B" in Honors Biology or Honors Chemistry or Honors Physics and "A or B" in Algebra II

This course is a college Organismal Biology course offered through Seton Hill University's College in High School program. This course will cover key concepts of biological science including those from the disciplines of anatomy, ecology, evolution, genetics, molecular biology, physiology, and systematics. The laboratory component of the course will introduce students to basic biological concepts through hands-on learning and the application of scientific methods while focusing on the evolution of prokaryotes and eukaryotes and the diversity of plants and
invertebrate animals. Students who successfully complete the CHS Biology course will receive four credits from Seton Hill University. There is a fee of $\$ 225$ for this course and financial aid is available. Students planning careers in science, medicine, biomedical engineering, microbiology or biochemistry should consider this course.

## HS0435 COLLEGE IN HIGH SCHOOL (CHS) ANATOMY AND PHYSIOLOGY

5 periods + lab period on alternate days Grades 11, 12
1.5 credits - AP

## Weight Prerequisites: "A, B, or C" in Honors Chemistry and Honors Biology

Recommended: CHS Biology and/or Honors Physics
CHS Anatomy and Physiology is a college course offered through Carlow University's College in High School Program. The students will examine the anatomy and physiology of the systems of the body. The relationship between structure and function and the concept of homeostasis are emphasized. Attention will be given to case studies and application of basic anatomical and physiological facts. Dissections will be performed to incorporate and enhance material discussed in lecture. There will be two trips during the year to Carlow University's cadaver lab where the viewing of cadavers and cadaver specimens will occur. This course is designed for students with a strong interest in the human body and/or health related careers that require at least a four year degree. Cost of the course will be $\$ 300$ per semester, with no financial aid being offered. Students may earn up to eight credits through this course. The course is suggested to be taken after Honors Biology and Honors Chemistry. It is also suggested that students have taken or are taking Honors Physics and/or CHS Biology.

HS0440 COLLEGE IN HIGH SCHOOL (CHS) PHYSICS 5 periods + lab period on alternate days

Grade 12
Prerequisites: "A or B" in Honors Physics or "A" in Academic Physics.
"A or B" in Calculus (can be concurrently enrolled in Calculus)
This course is the equivalent of an introductory, calculus-based, college physics course offered at the University of Pittsburgh. This course will focus mainly on classical mechanics but will also touch upon wave motion and thermodynamics. The emphasis of the course is on problem solving and applications of physics concepts. There will be four exams administered throughout the course; these are written and distributed by the University of Pittsburgh. The cost for the course is $\$ 300$ for four credits and financial aid is available through the university. Any student intending to pursue a career in mathematics, science or engineering will find this course essential.

## SCIENCE ELECTIVES <br> 1/2 Credit NO LAB PERIODS

This course encompasses many science disciplines as they are used to support criminal investigations and the legal system. Students will apply concepts of biology, organic and inorganic chemistry, physics, genetics, and anthropology as they explore: toxicology, serology, fingerprinting, drug analysis, and much more. Whether students desire to be a crime scene investigator, forensic pathologist, or some other medical scientist, this course will help them hone their investigative skills and review a wide range of science concepts.

HS0453C CYBER FORENSIC SCIENCE
Grades 10, 11, 12 .5 credit elective

This course encompasses many science disciplines as they are used to support criminal investigations and the legal system. Students will apply concepts of biology, organic and inorganic chemistry, physics, genetics, and anthropology as they explore: toxicology, serology, fingerprinting, drug analysis, and much more. Whether students desire to be a crime scene investigator, forensic pathologist, or some other medical scientist, this course will help them hone their investigative skills and review a wide range of science concepts.

## HS0450 INTRO TO ASTRONOMY

Grades 9, 10, 11, 12
.5 credit elective
What is that up in the night sky? How much longer will the Sun shine? Why does the Earth not fly away from or crash into the Sun? These questions and many more will be answered in this introductory course designed for those students interested in space science. Topics will include: Earth's place in space, our solar system, constellations, the life cycles of stars, planets in other solar systems, types of galaxies, and theories about how our universe was born and how it will end.

## HS0450C CYBER INTRO TO ASTRONOMY

Grades 9, 10, 11, 12
.5 credit elective
What is that up in the night sky? How much longer will the Sun shine? Why does the Earth not fly away from or crash into the Sun? These questions and many more will be answered in this introductory course designed for those students interested in space science. Topics will include: Earth's place in space, our solar system, constellations, the life cycles of stars, planets in other solar systems, types of galaxies, and theories about how our universe was born and how it will end.

Do you love animals (sometimes more than people)? If yes, then Zoology is the course for you! All groups of animals will be discussed, including invertebrates like jellyfish, butterflies and lobsters, and vertebrates like birds, reptiles, amphibians and fish. For each group, we will learn about how they are classified and named and their body structures, habitats, behaviors, and unique characteristics. We will NOT be dissecting animals, only studying them. To take Zoology, you must have successfully passed ninth grade biology.

HS0451C CYBER ZOOLOGY
Grades 9, 10, 11, 12 . 5 credit elective

Do you love animals (sometimes more than people)? If yes, then Zoology is the course for you! All groups of animals will be discussed, including invertebrates like jellyfish, butterflies and lobsters, and vertebrates like birds, reptiles, amphibians and fish. For each group, we will learn about how they are classified and named and their body structures, habitats, behaviors, and unique characteristics. We will NOT be dissecting animals, only studying them. To take Zoology, you must have successfully passed ninth grade biology.

## HS0448 MATERIALS SCIENCE

## Grades 11,12 <br> .5 credit elective

Could you make a better shoe? A better golf club? A better car? Look at any modern tool or toy and behind it you will find materials engineered with specific properties to make it work. This course will focus on the chemistry and science of solid materials and how processing affects the properties, function, cost, and performance of materials. Juniors and seniors interested in science, engineering, and technical fields are encouraged to enroll in this course. This course is highly recommended for students interested in robotics.

## HS0456 MATERIALS SCIENCE 2

Grades 11, 12 .5 credit elective
Did you take Materials Science 1 and want to learn more about the applications of materials and the engineering involved? This course will focus on the chemistry, physics, and engineering of metals, ceramics, polymers, and composites in greater depth and detail - including physical and chemical testing of materials. Materials Science 2 incorporates numerous hands-on activities and labs as well as several site visits/tours of businesses in the Pittsburgh area. Juniors and seniors that have successfully completed Materials Science and are interested in applied science, engineering, and/or technical fields are encouraged to enroll in this course.

Students planning post-secondary education in STEM, especially medical fields, will gain a better understanding of various careers and medical terminology. The course will emphasize root words at the heart of understanding terms common in science and health. Each unit will emphasize vocabulary related to individual body systems and the major organs of those systems. The learning experience will be accompanied by an introduction into related careers including nursing, technicians, and therapists, as well as others that students are interested in. This course is available to sophomores, juniors, and seniors who have completed Biology or Honors Biology with a minimum of a "C."

## HS0409 SUSTAINABLE STEM

Grades 9,10,11,12 . 5 credit elective

Have you ever wondered how all the things on the Earth are connected? Would you like to learn how the systems on the Earth sustain our daily lives? In this course we will learn how to apply critical thinking skills and develop tools needed to tackle contemporary science issues. These issues may include impact of invasive species, renewable energy sources, environmental health, climate change, and aquaponics.

HS0408 CODING 1 (TECHNICAL INQUIRY)
Grades 9,10,11,12
. 5 credit elective
An introductory course that can be flexibly taught in a single semester. The course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user-centered design, and data, artificial intelligence, and machine learning, while inspiring students as they build their own websites, apps, games, and physical computing devices.
language may be a difficult but worthy task for many students. The accomplishment of this task will be very worthwhile. Students are encouraged to enroll in at least three years of foreign language instruction during their high school years. Three years of instruction in a second language will allow students to become competent in the spoken and written language. In addition, Students with three years of instruction in foreign language will be better able to succeed in their post-secondary years.

HS0535 CONVERSATIONAL SPANISH
Grade 9,10,11,12
Semester .5 credit

In this course the emphasis is on oral Spanish communication skills, cultures of the Spanish Speaking World and comprehension of the Spanish spoken language. Course will provide various interactive group activities, promote a basic understanding of the Spanish language and a multicultural education. Students will participate in introductory conversational Spanish, be exposed to new vocabulary and some structures of the language. This course is not an equivalent to Spanish I but is a great choice if you would like to be exposed to the Spanish language and culture for business, pleasure or travel.

In Spanish I, students will develop the basics in the Spanish language which is spoken in North America, Central America, South America, Europe, the Caribbean, and the United States. Four language skills will be emphasized: listening, speaking, reading, and writing.

Spanish I is designed to equip the students with the necessary skills of "how to learn" a foreign language as well as to introduce them to the Spanish language itself. This course is communicative in nature; students learn to use the language, (not just use grammar) in everyday situations. Through readings, audio/video presentations, presentations, and group work, students learn to use Spanish to meet basic survival skills and needs. In the process, students will learn about themselves, their language, and the various Spanish-speaking cultures throughout the world.

In Spanish I, students will develop the basics in the Spanish language which is spoken in North America, Central America, South America, Europe, the Caribbean, and the United States. Four
language skills will be emphasized: listening, speaking, reading, and writing.
Spanish I is designed to equip the students with the necessary skills of "how to learn" a foreign language as well as to introduce them to the Spanish language itself. This course is communicative in nature; students learn to use the language, (not just use grammar) in everyday situations. Through readings, audio/video presentations, presentations, and group work, students learn to use Spanish to meet basic survival skills and needs. In the process, students will learn about themselves, their language, and the various Spanish-speaking cultures throughout the world.

HS0537 SPANISH II
Grade 9,10,11,12
One year - 5 periods
1 credit

Prerequisite: "C" or better in Spanish I
In Spanish II, students will continue to develop skills in listening, speaking, reading, and writing. The content of the course includes a review of Spanish I and an introduction to the grammatical construction of the language. The course is student-centered with an emphasis on using the language as naturally as possible with the context of everyday situations common to the student. Students will expand their thinking and awareness of themselves and their world through an understanding and appreciation of Hispanic culture, people, and society.

HS0537C CYBER SPANISH II
Grade 9,10,11,12
One year - 5 periods
1 credit

## Prerequisite: "C" or better in Spanish I

In Spanish II, students will continue to develop skills in listening, speaking, reading, and writing. The content of the course includes a review of Spanish I and an introduction to the grammatical construction of the language. The course is student-centered with an emphasis on using the language as naturally as possible with the context of everyday situations common to the student. Students will expand their thinking and awareness of themselves and their world through an understanding and appreciation of Hispanic culture, people, and society.

HS0541 SPANISH III HONORS
Grade 11,12
One year - 5 periods
1 credit-honors weight
Prerequisite: "B" or better in Spanish II Honors
Spanish III Honors begins with a review of verb tenses and key grammar points presented during

Spanish I and Spanish II. Initially, listening and speaking skills continue to be emphasized while applying them to new and different every day and/or survival situations (e.g. Shopping for clothing, dining out, traveling abroad). New grammar points and new verb tenses in the indicative mood are presented. At approximately mid-year there is a change in the emphasis to the reading and writing components of the language. Students extensively study and use the subjunctive mood of the verb within the context of art and literature. The pacing of this course is faster than that of Spanish III, and activities are developed to help enrich and enhance the understanding of the language. (An added value of 0.5 will be added to the quality point average per grade, i.e., $\mathrm{A}=4.5, \mathrm{~B}=3.5, \mathrm{C}=2.5$, etc.)

HS0541C CYBER SPANISH III HONORS
One year - 5 periods
Prerequisite: "B" or better in Spanish II Honors
Spanish III Honors begins with a review of verb tenses and key grammar points presented during Spanish I and Spanish II. Initially, listening and speaking skills continue to be emphasized while applying them to new and different every day and/or survival situations (e.g. Shopping for clothing, dining out, traveling abroad). New grammar points and new verb tenses in the indicative mood are presented. At approximately mid-year there is a change in the emphasis to the reading and writing components of the language. Students extensively study and use the subjunctive mood of the verb within the context of art and literature. The pacing of this course is faster than that of Spanish III, and activities are developed to help enrich and enhance the understanding of the language. (An added value of 0.5 will be added to the quality point average per grade, i.e., $\mathrm{A}=4.5, \mathrm{~B}=3.5, \mathrm{C}=2.5$, etc.)

## HS0543 SPANISH IV HONORS

One year - 5 periods
Grades 11,12
Prerequisite: "B" or better in Spanish III
Spanish IV offers students an extensive review of all verb tenses studied to date as well as key grammar points while continuing to introduce new verb tenses and grammar points. The emphasis in Level IV is upon reading and writing. The reading selections are representative of Hispanic culture and civilization and include a variety of texts such as fictional narratives, poems, essays, and historical accounts. Spanish IV has been designated as an honors course. (An added value of 0.5 will be added to the quality point average per grade, i.e., $\mathrm{A}=4.5, \mathrm{~B}=$ $3.5, \mathrm{C}=2.5$, etc.)

Spanish IV offers students an extensive review of all verb tenses studied to date as well as key grammar points while continuing to introduce new verb tenses and grammar points. The emphasis in Level IV is upon reading and writing. The reading selections are representative of Hispanic culture and civilization and include a variety of texts such as fictional narratives, poems, essays, and historical accounts. Spanish IV has been designated as an honors course. (An added value of 0.5 will be added to the quality point average per grade, i.e., $\mathrm{A}=4.5, \mathrm{~B}=$ $3.5, \mathrm{C}=2.5$, etc.)

HS054 ADVANCED PLACEMENT SPANISH
Grade 12
One year - 5 periods 1 credit - AP weight
Prerequisites: Teacher recommendation and a final grade of at least B in Spanish IV.
This AP Spanish Language course is comparable to an advanced level (5th- and 6th-semester or the equivalent) college Spanish language course. Emphasizing the use of Spanish for active communication, it encompasses aural/oral skills, reading comprehension, grammar, and composition.
In this course, special emphasis is placed on the use of authentic source materials and the integration of language skills. Therefore, you should receive extensive training in combining listening, reading, and speaking (or listening, reading, and writing) skills in order to demonstrate understanding of authentic Spanish-language source materials. (An added value of 1.0 will be added to the quality point average per grade, i.e., $\mathrm{A}=5.0, \mathrm{~B}=4.0, \mathrm{C}=3.0$, etc.)

## HS0503C CYBER FRENCH 1

GRADE 9,10,11,12
1 credit
In this course you will explore French vocabulary and grammar as well as the cultures of many French-speaking countries. Each week you will be responsible for completing all of the following important activities and tasks. Vocabulary Sets: Learn to quickly recognize and pronounce a wide range of useful vocabulary sets in a variety of contexts. Patterns: Learn how French grammar works.
Stretch Activities: Learn to comprehend, perform, and create sentences, stories, conversations and narratives. Games and Activities: Practice and reinforce your new French material. | CultureGrams ${ }^{\mathrm{TM}}$ and Videos: Read through the CultureGrams ${ }^{\mathrm{TM}}$ and watch the culture videos to learn important information about various French-speaking countries. Realia: Real life examples of using the language in a contextualized setting. Listening, speaking, reading, and writing assignments: You will have the opportunity to put your new knowledge into practice by actually producing in the language. Quizzes and Tests: Assessments will evaluate how you are progressing in the course. Be sure to study! Other Activities: Further your French acquisition by practicing and learning other interesting French concepts. You should plan to spend at least 45-60 minutes reading, studying, and practicing the information presented to you each day. Repeat the activities and study the information until you are confident with all the material.

HS0550C CYBER LATIN I
GRADE 9,10,11,12
1 credit
You are about to begin an exciting Latin adventure. In this class we will be learning the language of the ancient Romans. We will explore Latin through puzzles, songs, lectures,
vocabulary sets, and more.
The Romans developed an interesting and structured language that became the root of all of the Romance languages, including French, Spanish, Portuguese, Romanian, and Italian. If you already know any of these languages, you will see many similarities throughout your study of Latin. We will be learning about the culture of ancient Rome, comparing and contrasting things in Roman society with our society. We will also be learning some of the stories and myths that came from the Romans. You will be responsible for completing all of the following important activities and tasks. Vocabulary Sets: Learn to quickly recognize and pronounce a wide range of useful vocabulary in a variety of contexts. Patterns: Learn how Latin grammar works. Games and Activities: Practice and reinforce your new Latin material. Culture Lessons: Read through the culture lessons and learn important lessons about Roman culture. Listening, Speaking,
Reading, and Writing Assignments: You will have the opportunity to put your new knowledge into practice by actually producing the language. Quizzes and Tests: Assessments will evaluate how you are progressing in the course. Be sure to study! Other Activities: Further your Latin skills by practicing and learning other interesting Latin concepts. I suggest that you get a binder and print out all of the grammar lessons and vocabulary lists that you get each week. Keep them in your binder in order and use them as reference as you go through the course! In the activities of the course you will notice some small lines above vowels in Latin words ( $\overline{\mathrm{O}}$ ). Those lines are called macrons and are used to help you with pronunciation of the long vowels in a word. Make sure that you remember where the macrons are located on each word as you are expected to use them in all your written responses.

HS0612 BUSINESS LAW
Grade 9, 10, 11, 12
Semester - 5 periods
This course is designed to help students learn about their legal rights and responsibilities. The course explores many important social and ethical issues with emphasis tort law, and the basics of criminal and contract law.

HS0612C CYBER BUSINESS LAW
Grade 9, 10, 11, 12
Semester - 5 periods .5 credit

This course is designed to help students learn about their legal rights and responsibilities. The course explores many important social and ethical issues with emphasis tort law, and the basics of criminal and contract law.

HS0604 INTRO TO BUSINESS
Grade 9, 10, 11, 12
Semester - 5 periods
.5 credit
This is ab introductory business course designed to provide students with the skills needed to understand business. This course includes business management and entrepreneurship, communications and interpersonal skills.

HS0604C CYBER INTRO TO BUSINESS
Semester - 5 periods

Grade 9, 10, 11, 12
.5 credit

This is ab introductory business course designed to provide students with the skills needed to understand business. This course includes business management and entrepreneurship, communications and interpersonal skills.

HS0617 PERSONAL FINANCE
Grade 11
Semester - 5 periods
.5 credit
This one-semester course is a requirement for all juniors
The overall goal of this course is to give students a focus on how to manage common financial issues. Topics include budgets, payroll, checking accounts, savings, interest, credit, buying a car, buying a house, insurance, and taxes. Understanding and managing personal finances are key to one's future financial success.

The overall goal of this course is to give students a focus on how to manage common financial issues. Topics include budgets, payroll, checking accounts, savings, interest, credit, buying a car, buying a house, insurance, and taxes. Understanding and managing personal finances are key to one's future financial success.

## HS0605 HOW TO BUILD YOUR OWN SMALL BUSINESS Semester - 5 periods <br> Grade 11, 12 .5 credit

If your dream is to run your own small business, this is the course for you. Students learn the basics of planning and launching their own successful business. This course helps students develop the core skills they need to be successful. Learn how to come up with new business ideas, attract investors, market your business, and manage expenses. Turn your ideas into reality. Class covers Entrepreneurship, Marketing and Bookkeeping for small business.

## HS0605C CYBER HOW TO BUILD YOUR OWN SMALL BUSINESS Grade 11, 12

 Semester -5 periods 5 creditIf your dream is to run your own small business, this is the course for you. Students learn the basics of planning and launching their own successful business. This course helps students develop the core skills they need to be successful. Learn how to come up with new business ideas, attract investors, market your business, and manage expenses. Turn your ideas into reality. Class covers Entrepreneurship, Marketing and Bookkeeping for small business.

HS0606/HS0609 ACCOUNTING 1 and ACCOUNTING 2 (MUST BE TAKEN
TOGETHER)
ACCT 1 HS0606 -
Grade 10, 11, 12
Semester - 5 periods
.5 credit

ACCT 2 HS0609
Semester - 5 periods
.5 credit

ACCOUNTING 1 is a must for any college-bound student, especially anticipated accounting, business, finance or marketing majors, because it will provide him/her with a solid accounting foundation. Accounting I introduces concepts and principles based on a double-entry system of maintaining manual financial records for a sole proprietorship, It includes analyzing business transactions, journalizing, posting, and preparing worksheets and financial statements.

ACCOUNTING 2 will complete the accounting cycle for the sole proprietorship. Course includes review and full cycle simulations.

# CYBER ACCOUNTING 1 and ACCOUNTING 2 (MUST BE TAKEN TOGETHER) CYBER ACCT 1 HS0606C <br> Grade 10, 11, 12 <br> Semester - 5 periods <br> .5 credit 

CYBER ACCT 2 HS0609C
Semester - 5 periods
.5 credit

ACCOUNTING 1 is a must for any college-bound student, especially anticipated accounting, business, finance or marketing majors, because it will provide him/her with a solid accounting foundation. Accounting I introduces concepts and principles based on a double-entry system of maintaining manual financial records for a sole proprietorship, It includes analyzing business transactions, journalizing, posting, and preparing worksheets and financial statements.

ACCOUNTING 2 will complete the accounting cycle for the sole proprietorship. Course includes review and full cycle simulations.
(ACCOUNTING 1 MUST BE COMPLETED WITH C OR HIGHER TO CONTINUE TO ACCOUNTING 2.)

## HS0610 <br> ACCOUNTING 3 <br> Full year course (Accounting 1 and 2 prerequisite

Grade 10,11,12
1credit
The students will be able to complete the accounting cycle for a merchandising business organized as a partnership. The course explores several different areas of accounting such as departmentalized accounting, accounting control systems and general accounting adjustments. Students will gain experience with both manual and computerized accounting.

## HS0610C CYBER ACCOUNTING 3

Grade 10,11,12
Full year course (Accounting 1 and 2 prerequisite 1credit

The students will be able to complete the accounting cycle for a merchandising business organized as a partnership. The course explores several different areas of accounting such as departmentalized accounting, accounting control systems and general accounting adjustments. Students will gain experience with both manual and computerized accounting.

## HS0607 ACCOUNTING 4

Grade 11, 12
Advanced Accounting - Full year course (Accounting 3 prerequisite)
1 credit
The students will be able to complete the accounting cycle for a merchandising business organized as a corporation. This course will develop the students accounting knowledge through
both manual and automated means. Students will explore several different areas of accounting such as corporate, managerial and cost accounting.

HS0607C CYBER ACCOUNTING 4
Advanced Accounting - Full year course (Accounting 3 prerequisite)
Grade 11, 12
1 credit
The students will be able to complete the accounting cycle for a merchandising business organized as a corporation. This course will develop the students accounting knowledge through both manual and automated means. Students will explore several different areas of accounting such as corporate, managerial and cost accounting.

## HS0171 CAREER AWARENESS (FRESHMEN ONLY)

Six weeks - 5 periods

Grade 9 .25 credit

A six-week course which motivates students to start thinking about their future careers. Students will assess their skills, abilities, and interests. Students will utilize this information to analyze how their qualifications match specific job requirements. After identifying a chosen career, they will explore the career's working conditions, education needed, annual wage, and job outlook. They will complete a high school plan of study, look at postsecondary schools, and complete a job application for and resume which will assist in their individualized electronic career portfolios as a component to the GRADUATION PROJECT.

## HS0171C CYBER CAREER AWARENESS (FRESHMEN ONLY) Six weeks - 5 periods

## Grade 9

 .25 creditA six-week course which motivates students to start thinking about their future careers. Students will assess their skills, abilities, and interests. Students will utilize this information to analyze how their qualifications match specific job requirements. After identifying a chosen career, they will explore the career's working conditions, education needed, annual wage, and job outlook. They will complete a high school plan of study, look at postsecondary schools, and complete a job application for and resume which will assist in their individualized electronic career portfolios as a component to the GRADUATION PROJECT.

## VISUAL ARTS

"Thought is impossible without an image." - Aristotle
Courses offered at the high school are arranged with a progression set up for the student to follow and contain prerequisites to ensure students have prior knowledge of the content that is being taught.
**All students are required to begin the progression of art courses with Introduction to Art or Introduction to Illustration \& Mixed Media unless students have teacher Recommendation by Mr. Mann or Mrs. Rowe. **
(Yearlong-2 semesters)
(1/2 yearlong- 1 semester)

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**Art III Introduction to Art
**Art IV
Introduction to Illustration \& Mixed Media Crafts
Art History
Introduction 2-Dimensional Art**
Introduction 3-Dimensional Art**
Drawing **
Painting**
(** courses contain a prerequisite)
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**All courses have a prerequisite except Introduction to Art, Introduction to Illustration and mixed media \& Crafts**

HS0712 INTRODUCTION TO ART
Grade 9, 10, 11, 12
One semester
Not sure if art is for you? Try this introduction Art course. We will explore the fundamentals of art, including drawing, painting, crafts, and ceramics. You will be taught beginning skills that will enhance your art work, and give you confidence in future art classes. You will learn basic knowledge of styles, and the artists who were influential within the movements. No prior art experience is necessary and upon completion, the student can decide if they would like to pursue more advance level classes and follow a path that will lead to an area in art they find interesting.
**This course is designed for the true beginner who has not had an art class for a few years.

[^0] knowledge of styles, and the artists who were influential within the movements. No prior art experience is necessary and upon completion, the student can decide if they would like to pursue more advance level classes and follow a path that will lead to an area in art they find interesting.
**This course is designed for the true beginner who has not had an art class for a few years.
**YOU MUST PASS INTRODUCTION TO ART WITH A "C "OR BETTER TO PURSUE UPPER LEVEL ART CLASSES**

## HS0711 INTRO TO ILLUSTRATION AND MIXED MEDIA Grade 9, 10, 11, 12

## One semester

. 5 Credit
This semester course introduces students to the ideas of illustration and the principles of design needed to develop strong artistic images. Projects emphasize the development of creative attitudes and solutions to illustration problems. Through practical studio procedure, students will have the opportunity to experience diverse areas of illustration and be presented with a foundational overview of color and design theory for the visual artist. Basic color theory will be addressed, as will the applications of color across a variety of traditional mediums. These projects include bold black and white projects with markers, cartooning, advertising, jewelry making, enameling, glass etching, decoupage, mask and creature making. Students need to have a basic ability to sketch to express their ideas. This course develops students' skills in visual conceptualization and improves overall design.
**This course is designed for the true beginner who has not had an art class for a few years.
**YOU MUST PASS INTRODUCTION TO ILLUSTRATION AND MIXED MEDIA WITH A "C "OR BETTER TO PURSUE UPPER LEVEL ART CLASSES**

## HS0711C CYBER INTRO TO ILLUSTRATION AND MIXED MEDIA

Grade 9, 10, 11, 12
One semester . 5 Credit
This semester course introduces students to the ideas of illustration and the principles of design needed to develop strong artistic images. Projects emphasize the development of creative attitudes and solutions to illustration problems. Through practical studio procedure, students will have the opportunity to experience diverse areas of illustration and be presented with a foundational overview of color and design theory for the visual artist. Basic color theory will be addressed, as will the applications of color across a variety of traditional mediums. These projects include bold black and white projects with markers, cartooning, advertising, jewelry making, enameling, glass etching, decoupage, mask and creature making. Students need to have a basic ability to sketch to express their ideas. This course develops students' skills in visual conceptualization and improves overall design.
**This course is designed for the true beginner who has not had an art class for a few years.

## **YOU MUST PASS INTRODUCTION TO ILLUSTRATION AND MIXED MEDIA WITH A "C "OR BETTER TO PURSUE UPPER LEVEL ART CLASSES**

This semester course will focus upon the role of art and artists in culture and the history of artmaking. A study of traditional stylistic eras and movements, the investigation of works of art to determine origin, history, impact upon art and artists and interpretations of meanings will be explored. Works of art will be investigated in light of broad social, political and cultural themes that underscore art as an exciting and important form of human activity and accomplishment. In addition to supplemental reading material provided by the teacher, students will be required to utilize library and Internet resources. Homework, test material and daily class participation is essential for the success of this course. The course will explore Prehistoric Art up to Impressionism.

HS0707 ART HISTORY: Modern
Grade 9, 10, 11, 12
One semester
This semester course will focus upon the role of art and artists in culture and the history of artmaking. A study of traditional stylistic eras and movements, the investigation of works of art to determine origin, history, impact upon art and artists and interpretations of meanings will be explored. Works of art will be investigated in light of broad social, political and cultural themes that underscore art as an exciting and important form of human activity and accomplishment. In addition to supplemental reading material provided by the teacher, students will be required to utilize library and Internet resources. Homework, test material and daily class participation is essential for the success of this course. The course will explore Post-Impressionism to the art of today. Art History: Ancient should be taken before this course.

Grades: 10, 11, 12
One semester

## . 5 Credit

## Prerequisite: Passing grade of a "C" in Introduction to Art or Introduction to Illustration \& Mixed Media classes or by teacher recommendation

This drawing course is designed to give the student who is interested in art an opportunity to cover several concepts and to solve various problems. The student will demonstrate, through assigned projects, what has been learned about realistic, abstract, and non-objective drawing. Some of the drawing concepts to be covered are contour, gesture, volume, line, and value drawing. Students will work with various backgrounds, media, materials, and tools. The media might include pencils, pen and ink, crayon, graphite stick colored pencils, markers, scratchboard, charcoal, and mixed media.

# . 5 Credit 

## Prerequisite: Passing grade of a "C" in Introduction to Art or Introduction to Illustration \& Mixed Media classes or by teacher recommendation

This drawing course is designed to give the student who is interested in art an opportunity to cover several concepts and to solve various problems. The student will demonstrate, through assigned projects, what has been learned about realistic, abstract, and non-objective drawing. Some of the drawing concepts to be covered are contour, gesture, volume, line, and value drawing. Students will work with various backgrounds, media, materials, and tools. The media might include pencils, pen and ink, crayon, graphite stick colored pencils, markers, scratchboard, charcoal, and mixed media.

## HS0706 3 D DESIGN \& CERAMICS

Grades: 10, 11, 12
One semester
.5 Credit

## Prerequisite: Passing grade of a "C" in Introduction to Art or Introduction to Illustration \& Mixed Media classes or by teacher recommendation

Three-dimensional Design \& Ceramics is a course created for the student who is interested in art to experiment and create three-dimensional works of art using a variety of techniques and materials. For the students planning to further their education in some type of artistic discipline this course will enable them to develop a well-rounded portfolio. Students exploring their interests through the lessons in three-dimensional design will learn and fine-tune many skills that will be beneficial to them in any future. Three-dimensional Design and Ceramics will introduce students to the creation of 3Dimensional art using multiple medium that include but are not limited: ceramics, plaster, paper mâché, cardboard and found objects. This course requires a hands-onattitude for those who don't mind getting their hands dirty

HS0700 DRAWING I
Grades: 10, 11, 12
One semester
. 5 Credit

## Prerequisite: $A$ passing grade of $a$ " $B$ " in $\underline{2 D ~ A r t ~}$

This second level drawing course is designed to follow up after the 2 Art course to give the student an opportunity to cover more advanced concepts and to solve various problems on paper. The student will demonstrate, and expand on prior knowledge through assigned projects, what has been learned about realistic, abstract, and non-objective drawing. Some of the drawing concepts to be covered are contour, gesture, volume, line, and value drawing. Students will work with various backgrounds, media, materials, and tools with a heavy concentration on the human anatomy and realism. The media might include pencils, pen and ink, graphite stick colored pencils, charcoal, and mixed media.

Prerequisite: A passing grade of a " $B$ " in $\underline{2 D \text { Art or Drawing }}$
The painting course will allow students to learn color theory in monochromatic and analogous paintings. Emphasis will be placed on control of value and intensity within each painting. Paintings will be done in realistic, abstract, impressionistic, and non-objective styles. In employing subject matter and composition, we may use reference material such as books, magazines photos, still life setups, on-location drawings, and imagination. Media used may be water color, tempera, tissue, acrylic, ink, markers, and mixed media.

## HS0708 ADVANCED ART CLASS

One semester

Grade 11,12
. 5 Credit

## Prerequisite: Passing grade of a " $B$ " in ART 4 and teacher recommendation

Students wishing to enroll in any Advanced Art class must receive written teacher approval. This class works as an independent study geared to the student that has completed all offered art classes and wants to expand their work and rework a certain discipline that they previously worked in.

## HS0840 RETAIL PRODUCTION AND ENTREPRENEURSHIP One semester

Grade 10,11,12
. 5 Credit

Do you look at t-shirts and think, "I could design something better than that!" Designing and printing t -shirts is big business right now. This semester course introduces students to the heat press process of producing goods for a retail or online store. Students need a background in art and graphics to succeed in this class. Students will design and produce shirts, mugs, bags etc. that will be used by clubs and for special events throughout the school year. Students will learn the entire process from the beginning of the design through the final sales of the goods. Students will also learn the business side of starting a heat press business and will be required to solicit businesses for sponsorships for some projects.

[^1]
## Music and Theater

## OBJECTIVES:

The general objectives of the music courses at West Mifflin Area High school are:

- To develop the skills of reading music notation
- To develop the technical abilities necessary to sing or play music
- To develop listening skills
- To develop skills of interpretation
- To acquire an appreciation for music and the related fine arts
- To develop skills to create, produce, and record music
- To develop improvisational skills
- To evaluate the work of one's self and others
- To acquire a knowledge of history and culture as it relates to music and the fine arts
- To develop skills utilizing the latest available technology as it relates to various music applications

It is also intended that the music courses will result in the student possessing the ability to use critical thinking skills to make value judgments in the fine arts and practical domains based upon aesthetic principles.

For those students who participate in performing ensembles, it is intended that they will acquire positive attitudes toward responsibilities to one's self, the ensemble, performances; and to recognize and respect the values of others.

## COURSE OFFERINGS

HS0716 WIND ENSEMBLE
Grades: 10, 11, 12
One year
1 Credit
This class is open by audition to any sophomore, junior or senior student (freshman with teacher approval) and meets daily for one forty-two minute period and is taught by a music teacher with background in instrumental music. Wind Ensemble is designed to teach upper level band (level $3.5-6)$ students a variety of music compositions and arrangements meant for college bound or advanced instrumentalists.

This instrumental ensemble is open to any qualified tenth, eleventh, or twelfth grade student who plays a band instrument. This ensemble will rehearse daily for one forty-two minute period and is taught by a music teacher. This course is divided into marching band and concert band. The scheduled class time is devoted to learning of both marching band music and concert band music. The performance schedule dictates the music to be rehearsed. The repertoire includes music from many eras appropriate to the abilities of a high school band student. This ensemble performs at football games, parades, appropriate assemblies, evening concerts, and select performances suitable for this ensemble.

HS0724 ORCHESTRA
Grades: 9, 10, 11, 12
One year
1 Credit

The Orchestra rehearses daily for one, forty-two minute period. The ensemble is open to any qualified student in grades 9-12 of string, woodwind, brass, or percussion instruments. The HS Orchestra's repertoire includes music from the Renaissance through the Contemporary periods along with American Popular music from the early 1900's through the present day. The Orchestra performs evening concerts and serves as the pit orchestra for the high school "Broadway" Musical productions. Some after school and evening rehearsals are required.

## HS0721 CONCERT CHOIR

Grades: 9, 10, 11, 12
1 Credit
Full year
One semester or every other day
Do you want to learn how to become a better singer and learn how to harmonize with others? Do you want to make new friends that also enjoy music? The Concert Choir is for any 9, 10, 11, or $12^{\text {th }}$ grade student wishing to learn how to sing and/or improve his or her vocal skills. This ensemble meets 5 days a week for a full year or for one semester. Students will learn a wide variety of music including popular music from the early 1900's to the present. All students will acquire the skills to develop proper singing techniques, read music notation, and learn how to sight sing. The Concert Choir performs at appropriate assemblies and evening concerts. This course will promote confidence and discipline while teaching students how to connect with the audience for an entertaining performance in a positive learning.

HS0718 TITAN CHORALE
Grades: 10, 11, 12
Full year
One semester or every other day

1 Credit
.5 credit

Call this all-female choir treble threat! Titan Chorale is an energetic female vocal ensemble that will challenge students to sing in close harmonies to make their singing skills pitch perfect. Students will enjoy a positive singing environment that promotes friendship while making music. This course is open to any 10,11 , or $12^{\text {th }}$ grade student with some singing experience wishing to
improve her vocal skills. This ensemble will perform more advanced choral selections, learn basic music theory, and sight-reading skills to aid in daily music reading helping to develop you into a solid musician. This course will promote confidence and discipline while teaching students how to connect with the audience for an entertaining performance. The Titan Chorale performs at appropriate assemblies and evening concerts.

HS0720 SHOW CHOIR
Full year

Grade 10, 11, 12
1 Credit

This course will help students to develop vocal skills and choreography techniques while learning how to connect with the audience for an energetic and exciting performance. This course will also promote confidence, discipline, and teach young performers how to perform dynamically on stage. Being a member of the Show Choir will also give students the opportunity to use their creativity to choreograph and teach dance numbers. This vocal ensemble is for a full year and meets 5 days a week and is open to male or female students by audition. The repertoire includes popular music, Broadway show music, a cappella, holiday selections, and various jazz styles from the early 1930's to the present. All students are required to dance and sing as a member of the ensemble The Show Choir performs at many assemblies, outside venues, and evening concerts.

## HS0727 MUSIC TECHNOLOGY I (BASICS OF AUDIO TECH) Grade 9,10,11,12

 1 Semester . 5 CreditThis class is open to any Freshman, Sophomore, Junior or Senior student and meets daily for one forty-two minute period. It is taught by a music teacher with background in computers, electronic instruments, appropriate software, sound reinforcement equipment, music theory, arranging, composition and sound production. Music Tech I is designed to teach the basics of using a Digital Audio Workstation and playing electronic instruments to prepare students for music arranging, composition, creative writing, and performance in various styles used by the modern band (such as, rock, pop, R\&B, hip-hop, reggae, and country). There are no prerequisites for Music Tech I, but students recommended by teachers should be given preference.

## HS0729 MUSIC TECHNOLOGY II (Recording \& Arranging) Grade 9,10,11,12

1 Semester
. 5 Credit
This class is open to any Freshman, Sophomore, Junior, or Senior student and meets daily for one forty-two minute period. It is taught by a music teacher with background in computers, electronic instruments, appropriate software, sound reinforcement equipment, music theory, arranging, composition and sound production. Music Tech II is designed to teach students that have learned the basics of playing electronic instruments to create arrangements and record music in preparation for composition, creative writing, and performance of their own material in various styles used by the modern band (such as, rock, pop, R\&B, hip-hop, reggae, and country). Prerequisites: Passed Music Technology I and teacher recommendation.

This class is open to any Sophomore, Junior or Senior student and meets daily for one forty-two minute period. It is taught by a music teacher with background in computers, electronic instruments, appropriate software, sound reinforcement equipment, music theory, arranging, composition and sound production. Music Tech III is designed to combine the most current technology of electronically produced music with similarly advanced computer applications to teach music arranging, composition, creative writing and performance in various styles used by the modern band (such as, rock, pop, R\&B, hip-hop, reggae, and country).
Prerequisites: Passed Music Tech I and II and teacher recommendation.
HS0731 THEATRE TECHNOLOGY I
Grades 9, 10, 11, 12
One Year

## 1 Credit

This full year elective course is open to all freshman, sophomore, junior, and senior students and has a value of one credit. This course focuses on basic elements of the Technical Theatre starting with terminology and career paths. We will then proceed to scenic construction methods, lighting fixtures and console operation, as well as audio system setup and live sound mixing. Along the way students will be introduced to basics in theatrical/building management, rigging, and production management. The goal is to provide students with a solid base if they would like to pursue a career in technical theater and give every student transferrable skills they can use in the future. Students who elect this course are required to participate as active members of the Stage Crew. Stage Crew participation includes after school activities such as the Spring musical production, Fall/Spring plays, music department concerts, and school district/community events that take place in the high school auditorium.

## HS0736 THEATRE TECHNOLOGY II

One Year

Grades 10, 11, 12
1 Credit

This full year elective course is open to sophomore, junior, and senior students who have completed Theatre Technology I. This course focuses on advanced technical elements of the theatre including light programming, recorded and live sound production, staging/rigging, and set design/construction. The goal is to provide students with a solid base if they would like to pursue a career in technical theater, and give every student transferrable skills they can use in the future. Students who elect this course are required to participate as active members of the Stage Crew. Stage Crew participation includes after school activities such as the Spring musical production, Fall/Spring plays, music department concerts, and school district/community events that take place in the high school auditorium. Teacher recommendation is required

Experience how acting can build your self-confidence and help you feel more comfortable presenting yourself in front of others. This course is an exciting and fun way to learn more than just the basics of acting. The purpose of this semester class which meets 5 days a week for one period is to give any $9^{\text {th }}$ through $12^{\text {th }}$ grade student an increased appreciation of and additional experience in all aspects of theater. Students will study various acting techniques, theatre terms, vocal acting, and apply these elements to various scripts and performances. All students will be required to perform in front of the class and learn how to work cooperatively with others.
Students will also learn audition, rehearsal, and directing techniques and have the opportunity to write short skits to be performed. This course will also promote confidence, discipline, and teach young performers all about life on the stage all while giving you a creative outlet! Students who are successful in this course will have the opportunity to be recommended for the next level class Drama II.

HS0733 DRAMA II/Advanced Acting Techniques
Grades: 10, 11, 12
Full year 1 Credit

This full year course, which meets 5 days a week for one period, is open to $10^{\text {th }}-12^{\text {th }}$ grade students recommended by the teacher after completion of one of the introductory drama courses. Students will gain theatrical experience and an advanced appreciation of all aspects of theater. Students will build upon various acting techniques learned in Drama I, Introduction to Improvisation, and/or Music Theatre and apply these elements to various scripts and performances. Students will also learn audition, rehearsal, and directing techniques and have the opportunity to write scenes and skits to be performed. Students will also study plays, musicals, and characterization more in depth. Students will participate in some facet in a dramatic performance at the discretion of the teacher whether it is a fall play, one act plays, student written skits, dinner theater, scene night, or a musical review. Students in Drama II will also have opportunities to compete in local monologue competitions.

## HS0737 Introduction to Improvisational Acting (Whose Line Is It?) Grades 9, 10, 11, 12 One Semester . 5 Credit

Do you enjoy making people laugh? Are you full of energy and creativity? This course is for you! Introduction to Improvisational Acting is a semester course that meets 5 days a week and will introduce students to the many facets of improvisational acting. Students will experience various acting games and warm-ups that will inspire their freedom of creativity. Experience how acting can build your self-confidence and help you better present yourself in front of others. This course is an exciting and fun way to learn the basics of acting while learning how to work cooperatively with others. Emphasis will also be placed on learning performance skills such as connecting with the audience and telling a story through your performance. This course will also promote confidence, discipline, and teach young performers all about life on the stage. Students
who are successful in this course will have the opportunity to be recommended for the next level classes Drama I and II.

## HS0738 Introduction to Musical Theatre (So, You Want to Be on Broadway?) Grades 9, 10, 11, 12

 One Semester . 5 CreditIf you cannot stop listening to "Hamilton", "Dear Evan Hanson", or even classic show tunes, this course is for you. This semester course that meets 5 days a week for one semester and will introduce students to the exciting world of musical theatre. Students will learn basic singing and acting techniques while experiencing various music theatre styles. This course will also teach students how to find appropriate songs for their vocal range, acting ability, and how to better prepare for auditions. Emphasis will also be placed on learning how to connect with the audience through your performance. This course will also promote confidence, discipline, and teach young performers all about life on the stage! Students who are successful in this course will have the opportunity to be recommended for the next level classes Drama I, II, and even the Show Choir.

## HS0739 Partners Music <br> One Semester

Grades 11, 12 . 5 Credit

This class is open to any Junior or Senior student and is a semester elective. The course is best suited for students that are considering an education degree and especially great for those considering special education. Students will work with a music teacher to learn educational practices when teaching special education life-skills students. Although we will be teaching music, the students do not need to be proficient on a musical instrument or in any other music class. The content will be basic and demonstrated by the teacher before students work with the life-skills students. There are no prerequisites for this course.

## HS0740 School of Rock

Grades 10,11,12
One semester.
This class is open to any sophomore, junior, or senior student with an interest in playing in a small band. It is best suited for students that already have at least a basic knowledge of playing an instrument such as, piano, guitar, bass, drums. However, all students are welcome to join the "School of Rock"! In this course students will be placed in small groups (or bands) based on their ability level and preference of song style (if possible) where they will learn popular songs and create an arrangement (or cover) that will be performed by the end of the semester. Students may take this course more than one semester.

## FAMILY AND CONSUMER SCIENCES

The major focus of Family and Consumer Sciences (Food \& Nutrition) courses at West Mifflin Area High School is the development of skills and promotion of values that enhance both work and family life. In these Family and Consumer Sciences courses, students practice life skills related to wise consumerism, good nutrition and health, safe food handling skills, and appropriate social and workplace behavior. Guided by Pennsylvania Academic Content Standards and reinforced by hands-on learning, students have a unique opportunity to develop their interests, talents, and potential.

## HS0805 FOOD AND NUTRITION I

Grades: 9,10,11,12
One Semester - 5 Periods . 5 Credit

This introductory course is designed to provide rigorous and relevant learning experiences for students to study the principles of nutrition for individual and family health, fitness, and wellness. Students will gain knowledge and experiences in nutrition, food safety and sanitation, kitchen work centers, meal preparation, table service and etiquette, and appliance use. Weekly laboratory instruction allows students to explore concepts and practice techniques learned in class. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

HS0805C CYBER FOOD AND NUTRITION I
Grades: 9,10,11,12
One Semester - 5 Periods
This introductory course is designed to provide rigorous and relevant learning experiences for students to study the principles of nutrition for individual and family health, fitness, and wellness. Students will gain knowledge and experiences in nutrition, food safety and sanitation, kitchen work centers, meal preparation, table service and etiquette, and appliance use. Weekly laboratory instruction allows students to explore concepts and practice techniques learned in class. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

HS0825 FOOD AND NUTRITION II
Grades: 9,10,11,12
One Semester - 5 Periods

## Prerequisites: Student MUST have completed Food and Nutrition I with a "C" or above.

This course is designed to assist students in making critical decisions about food, which contributes to health and well-being. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills and careers in nutrition and food service. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

## Prerequisites: Student MUST have completed Food and Nutrition I with a "C" or above.

This course is designed to assist students in making critical decisions about food, which contributes to health and well-being. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills and careers in nutrition and food service. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

HS0803 CULINARY ARTS I
Grades: 10,11,12
One Semester - 5 Periods
.5 Credit
Prerequisites: Student MUST have completed Food and Nutrition I and Food and Nutrition II and received a "C" or above.

This course will provide students with the basic skills required for entry level work in a bakery or pastry shop of a restaurant or hotel. These skills include: working in a safe and sanitary manner; working as part of a team; reading and accurately following a recipe; proper mixing, make-up and baking of yeast raised breads, cookies, cakes, pies and tarts; cake icing; basic decorating techniques using a pastry bag; plating techniques. Students will also explore various careers in the industry. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Weekly laboratory instruction allows students to explore concepts and practice techniques learned in class. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

HS0803C CYBER CULINARY ARTS I
Grades: 10,11,12
One Semester - 5 Periods
. 5 Credit
Prerequisites: Student MUST have completed Food and Nutrition I and Food and
Nutrition II and received a "C" or above.
This course will provide students with the basic skills required for entry level work in a bakery or pastry shop of a restaurant or hotel. These skills include: working in a safe and sanitary manner; working as part of a team; reading and accurately following a recipe; proper mixing, make-up and baking of yeast raised breads, cookies, cakes, pies and tarts; cake icing; basic decorating techniques using a pastry bag; plating techniques. Students will also explore various careers in the industry. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Weekly laboratory instruction allows students to explore concepts and practice techniques learned in class. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

Prerequisites:Student MUST have taken Food and Nutrition I, Food and Nutrition II, and Culinary Arts I and received a "C" or above. Also, this course requires instructor recommendation.

In this course students will examine food safety, cooking methods, eating habits, and dietary guidelines of various cultures around the world. By investigating cultural, spiritual, and social influences on food choices students gain an awareness and understanding of diverse populations within our society. Students will develop independent study projects and explore various careers available in the industry. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Weekly laboratory instruction allows students to explore concepts and practice techniques learned in class. Basic skills of math, science, and communication, when appropriate in content, will be highlighted.

## Philosophy of the Child Development Curriculum

The philosophy of the child development program at West Mifflin Area High School is to provide students with the knowledge of research and theory currently in practice. FCS students will be provided with the skills necessary to teach preschoolers at their own level or what is developmentally appropriate for their abilities.

This knowledge will be gained and mastered through completion of formal and informal observation, classroom assignments, readings, research, tests and individual portfolio.
Content of the child development classes will include safety, health, parenting, nutrition, and developmental stages of the preschooler.

FCS students will follow all applicable regulations in order to provide an environment that is safe and academically stimulating.

## HS0821 CHILD DEVELOPMENT -PARENTING AND FAMILIES Grades $\mathbf{9 , 1 0 , 1 1 , 1 2}$

 One semester - 5 periodsThis course is designed to help students acquire knowledge and skills to use in everyday life. Students will learn about healthy relationships, communicating and the function of families. The course stresses the risks of sexual activity so students are capable of making informed decisions. The course gives students the tools needed to talk about these subjects with their own families. Students will gain knowledge about pregnancy and what occurs in the body during pregnancy and why care during pregnancy is so important to an unborn baby. During the course there will be several projects to learn about your own heredity, genetic and birth defects, and also what pregnancy is like in other cultures. The course is very informative and engaging for students in any grade level.

## HS0821C CYBER CHILD DEVELOPMENT -PARENTING AND FAMILIES

## Grades 9,10,11,12

One semester - 5 periods
.5 credit
Prerequisite: None
This course is designed to help students acquire knowledge and skills to use in everyday life. Students will learn about healthy relationships, communicating and the function of families. The course stresses the risks of sexual activity so students are capable of making informed decisions. The course gives students the tools needed to talk about these subjects with their own families. Students will gain knowledge about pregnancy and what occurs in the body during pregnancy and why care during pregnancy is so important to an unborn baby. During the course there will be several projects to learn about your own heredity, genetic and birth defects, and also what pregnancy is like in other cultures. The course is very informative and engaging for students in any grade level.

HS0824 CHILD DEVELOPMENT - WORKING WITH CHILDREN
One semester - 5 periods
Prerequisite: None

Grades 10,11,12
.5 credit

This course is designed for any student that would like to learn how to work with and/or teach young children. Working with Young Children the prerequisite course for any student that would like to take the Child Development Lab Course. The course is designed to help students develop skills to guide, discipline, and educate children effectively. The course will focus on the four main types of development: physical, social, emotional, and intellectual. With each area of development students will learn how to create and implement lessons for children at the preschool age-level. Students will also gain knowledge of how to effectively and safely operate a preschool classroom and effective babysitting techniques. During every unit students will complete a mini-lab that will result in students presenting materials to either their group or the class.
Students will also gain much knowledge that can be applied to teaching any grade level, such as lesson plan writing. This course is suggested for those that plan on pursuing teaching as a career.

HS0823 CHILD DEVELOPMENT LAB
One semester - 5 periods
Year Long-5 periods

Grades 11, 12
1 Credit
1 credit (Maximum credits: 2 total)

Prerequisite: "C" or better in "Working with Children" class + permission from instructor In this class students will be working hands on with preschool children that have been enrolled into the program from the West Mifflin Area Community. Professionalism and maturity is a must from all students that enroll in this class. Lab is a participation-based class, where students will learn to engage with and teach children effectively. Students will be required to write and present preschool lessons on a weekly basis as well as compile a case study on a child in the program. Students will also be required to complete a portfolio of work they have completed in the class that can be used for future college or career interviews. This course is an excellent selection for any student interested thinking about a career choice in education or child development.

This course is an introductory course for $10^{\text {th }}-12^{\text {th }}$ graders recommended by their teachers, guidance counselors, or principals to learn how to work with pre-k children. This course recommendation only can serve as a requirement to work in the pre-k lab course. Students will prepare materials, set up activities, learn how to teach circle time, etc.

HS0822 CHILD DEVELOPMENT, PRE-K LAB
Grades 10,11,12
One Year - 5 Periods - Period 3-5 (12 seats per class period) 1 credit

This course will give students the opportunity to teach in our pre-k classroom here at the high school. Students will learn how to plan and prepare lessons and activities along with learning effective teaching techniques while working with pre-k children. This course will allow students to make educated decisions on if they would like to go into career fields that include working with children or into the profession of teaching. This course is participation based and students' attendance will impact a student's grade.

## HS0820 FASHION AND INTERIOR DESIGN

From the clothes we wear to the homes we live in, fashion and design is all around us. In this course, students who have a flair for fashion or who constantly redecorate their room find out what it is like to work in the design industry by exploring career possibilities and the background needed to pursue them. Students try their hand at designing as they learn the basics of color and design, then test their skills through hands-on projects. In addition, they develop the essential communication skills that build success in any business. See teacher for a list of needed supplies for the course.

## HS0820C CYBER FASHION AND INTERIOR DESIGN

Grades 9,10,11,12 One Semester - 5 periods

From the clothes we wear to the homes we live in, fashion and design is all around us. In this course, students who have a flair for fashion or who constantly redecorate their room find out what it is like to work in the design industry by exploring career possibilities and the background needed to pursue them. Students try their hand at designing as they learn the basics of color and design, then test their skills through hands-on projects. In addition, they develop the essential communication skills that build success in any business. See teacher for a list of needed supplies for the course.

# TECHNOLOGY EDUCATION 

"Using Technology to Solve Problems"

The Technology Education Department is dedicated to providing students an understanding of how technology works to help solve problems. The content and activities of the curriculum use methods of discovery, problem solving, designing, creating, and constructing using various tools, equipment, machines, and materials within the systems of transportation, construction, communication, and manufacturing.

We offer courses in 3 major areas:
Manufacturing • Computer Graphics • Video/Animation

## No Pre-Requisite Courses:

Intro to Manufacturing
Robotics/Drones
Intro to Computer Graphics
Intro to Video \& Animation
Titan TV
Morning Broadcast
Photography
3D Design \& Printing

## Pre-Requisite Courses:

Manufacturing
Advanced Manufacturing
Graphics
Advanced Graphics
Advanced 3D Design \& Printing
Retail Production \& Entrepreneurship
*Semester Course

## INTRODUCTION COURSES

Introduction courses are for any student looking to explore technology to see what types of careers there are so they can choose the appropriate career track.

HS0875 INTRO TO MANUFACTURING
One Year - 5 Periods
Grades 9-12

Intro to Manufacturing is an activity-based, hands on courses that provide students the opportunity to participate in problem solving activities in one or more of the following technology related areas; manufacturing and construction. Students will learn the basic tools, machines and safety aspects in a shop environment.

This semester course is specifically for students interested in computer graphics. Students will be given a broad overview of the careers of graphic design and 3D design. Students will learn and apply software skills to create a variety of projects that could include: t-shirts, photo manipulation, key chains, and 3D printed objects.

HS0886 INTRO TO VIDEO \& ANIMATION
Grade 9-12
One Semester - 5 Periods
This semester course is designed to introduce students to the planning, shooting and editing of YOUTUBE videos used within our Morning Broadcasts. All aspects of Videography discussed.

## CORE COURSES

Core courses are pre-requisite courses for students are interested in the career track they have chosen. These are essential courses to take before going into the advanced courses.
*HS0874 MANUFACTURING
One Year - 5 Periods

Grade 10-12
1 Credit

Prerequisite: Grade of a "C" or above in Intro to Manufacturing or Teacher Recommendation
This course is a full year introduction where students will continue to develop advanced skills in project design, wood identification, and the construction of appropriate projects from drawings. An introduction to computer-controlled machinery, as time permits, will ready each student for future coursework and careers. Projects are chosen in consultation with instructor.

## *HS0868 ROBOTICS /DRONES

Grade 9-12
One Year - 5 Periods
1 Credit
Robotics/Drones is a program of studies that unleashes the creative potential of mathematical reasoning, scientific analysis, and the clear articulation of ideas. Robotics is about inventing, redesigning, and applying knowledge about robotics into a design that will engage in the art of automation; inventing a new dimension of learning and doing such through the invention of unmanned aircraft. The Drone Program places particular emphasis on student-centered design and the use of scientific inquiry. Maintaining a focus on interpersonal and communications skills while developing a practical understanding of related physical science and mathematics skills are essential components to the successful Drone design and builds that are the future of Technology.

## Prerequisite: Grade of a "C" or above in Intro to Computer Graphics

This course provides the fundamental basics of design, illustration, and page layout through the use of Adobe Photoshop, Illustrator, and InDesign. As students' progress through the course, they are trained in creative problem solving and learn to offer solutions that are effective in the graphic design industry. Example projects could include: logo design, SnapChat filters, cartooning, customized phone cases, and sublimation products like license plates, coasters, etc.
*This course can be taken every other day opposite a lab or gym class (schedule permitting).

## HS0871 3D DESIGN \& PRINTING

Grade 9-12
One Year - 5 Periods
This course is designed to provide students with an opportunity to pursue skills and applications in mechanical and industrial design. Students will work on the drawing board as well as explore computer-aided drafting techniques (2D), 3-dimensional design, and 3D printing. Areas of study will include, but are not limited to: geometric construction, orthographic projection, conventional dimensioning practices, sectional views, auxiliary views, and pictorial sections. Students will also engage in an engineering problem solving activity to design, produce, test, and analyze products.

## HS0871C CYBER 3D DESIGN \& PRINTING

Grade 9-12
One Year - 5 Periods
1 Credit
This course is designed to provide students with an opportunity to pursue skills and applications in mechanical and industrial design. Students will work on the drawing board as well as explore computer-aided drafting techniques (2D), 3-dimensional design, and 3D printing. Areas of study will include, but are not limited to: geometric construction, orthographic projection, conventional dimensioning practices, sectional views, auxiliary views, and pictorial sections. Students will also engage in an engineering problem solving activity to design, produce, test, and analyze products.

HS0888/HS0883
TITAN TV*
Grade 9-12
HS0883 One Semester - 5 Periods
. 50 Credit
HS0888 One Year - 5 periods
1 Credit

## Course may be taken TWICE for credit.

The Titan TV course will provide students with a basic understanding of the technology behind video as an information medium, and some of the ways in which it is created to achieve its desired effect on an audience. Upon completion, students should be able to demonstrate production skills and techniques as it relates to producing a variety of video formats. Example formats include
producing a school news program, video annual, team sports highlights, community documentaries, and promotional advertising commercials. The students in the Video Production curriculum will complete audio/visual productions which incorporate the appropriate use of technical equipment and the disciplines of scripting, picture composition, performance, directing, and editing in order to communicate to specific audiences. They will evaluate and determine the effectiveness of a production's success in achieving its purpose. Example projects include: fictional product commercial, public service announcement, music video, short story film, news cast, and current event interviews.

## ADVANCED COURSES

Advanced courses are for students who plan to go into these careers after high school, either into the work force or continuing education.

HS0874 ADVANCED MANUFACTURING*
Grade 11-12
One Year - 5 Periods
1 Credit

## Prerequisite: Grade of a "B" or above in Manufacturing or instructor permission

## Course may be taken TWICE for credit.

The Advanced Manufacturing Processes involved with the design of products. Emphasis is placed on the analysis of the various machined components, including the design of the products, material selection, and fabrication. Examples of student learning activities include: design and producing a product, constructing jigs and fixtures, estimate the cost of a product, and conduct material research. Additional areas of emphasis include the design of fixtures as related to wood-machining processes, and machine shop drawings and information, including basic set up and operation of lathes, milling machines, grinders, drilling machines, and shapers. Example project include: book case, night stand, coffee table, Adirondack chair, CD rack, and golf caddy, and many more. Students will also design and develop project plans and blueprints for various projects. Students will utilize all machines and tools in the woodshop. Students will work on various projects including but not limited to; products for the school store, furniture for district/classrooms, shop design and improvements, as well as individual projects.

HS0884 ADVANCED GRAPHICS*
Grade 11-12
One Year - 5 Periods
1 Credit
Prerequisite: Grade of a "B" or above in Graphics or instructor permission

## Course may be taken TWICE for credit.

This is an independent-study course emphasizing the aspects of layout, design, printing, assembling, and producing a media service for customers. Students will continue to learn advanced concepts in the areas of graphic design, page layout/typography, screen printing, large format printing, sign-making, etching, and portfolio design. All students will be required to assist in
designing, printing, and finishing various publishing needs for the school district. Students in this course go on to major in fields such as Graphic Design, Multimedia Technology, Computer Animation, Industrial Design, Web Publishing, and Publishing/Advertising at universities or technical schools.
*This course can be taken every other day opposite a lab or gym class (schedule permitting).
HS0878 ADVANCED 3D DESIGN \& PRINTING*
Grade 11-12
One Year - 5 Periods
1 Credit
Prerequisite: Grade of a "B" or above in 3D Design \& Printing or instructor permission

## Course may be taken TWICE for credit.

This course is a continuation of the 3D Design \& Printing class and is for any student who plans on pursuing a career in engineering, trades, architecture, or interior design. Students will continue with mechanical 3D drawings, but will also be introduced to basic and advanced concepts in architecture through the use of computer-aided drafting and 3D rendering software. Example projects include: reverse engineering, designing office layouts, sports stadium/complexes, amphitheater, and dream houses.
*This course can be taken every other day opposite a lab or gym class (schedule permitting).

## EXTRA COURSES

HS0903 MORNING BROADCAST
Grade 9-12
One Semester - 5 Periods
The Morning Broadcast is a class that combines journalism with video. In this class students will first learn the art of researching a topic and then reporting it via writing/speaking. The experience of reporting news through video will be emphasized heavily during the course of the semester. The Morning Broadcast is all about creating a meaningful show each and every class. Video segments come together in a professional way, utilizing tools in the studio and classroom to produce engaging material that is entertaining, thought provoking, and showcases our school in a positive light. The studio team will run a show every day and must work as a team to have a seamless production.

HS0893 PHOTOGRAPHY
Grade 9-12
One Semester - 5 Periods
The emphasis in this course is on the terminology and procedures used to take and product digital photographs. The names and functions of all the camera parts and adjustments will be taught throughout the course. Students will receive hands-on experience with digital cameras, scanners, and computer software. Adobe Photoshop will be used to enhance and manipulate digital
photographs by color correction, selective coloring, special effects, filters, lighting and dodge/saturation techniques. Basic design and composition are also an integral part of this course. At the end of the semester, each student will be permitted to create a portfolio of his or her work on a CD or DVD. It is not required but recommended that each student have their own digital camera for the course. Independent and cooperative work is inherent for successful completion of this course.

HS0840 RETAIL PRODUCTION \& ENTREPRENUERSHIP* Grade 10-12
One Semester - 5 Periods
. 5 Credit
Prerequisite: Teacher Recommendation
Do you look at t -shirts and think, "I could design something better than that!" Designing and printing t -shirts is big business right now. This semester course introduces students to the heat press process of producing goods for a retail or online store. Students need a background in art and graphics to succeed in this class. Students will design and produce shirts, mugs, bags etc. that will be used by clubs and for special events throughout the school year. Students will learn the entire process from the beginning of the design through the final sales of the goods. Students will also learn the business side of starting a heat press business and will be required to solicit businesses for sponsorships for some projects

HS0897 3D Character Animation
Grade 9-12
One Semester - 5 Periods
. 5 Credit

This Course provides an independent editor with an opportunity to edit motion graphics and characters for short film and animation clips. Exploring storytelling and character design through editing techniques in high end animation tools using motion graphics to create 3D Artwork and fully controlled motion techniques. In this course you will design and animate characters and atmospheres in Daz3D Animation software. There will be a focus on keyframing, motion tracking, composite video and rendering techniques.

## PHYSICAL EDUCATION AND HEALTH

All students will participate in 12 weeks of freshman physical education and 12 weeks of health education. The freshman physical education and health combine to equal $1 / 2$ credit. In addition, all students must enroll in one semester of physical education during their sophomore year. All students must follow the published course attendance requirements as published in the Planned Course Overviews published for each course. Participation regulations require that a student attend at least $60 \%$ of all course meetings for a semester and $80 \%$ of all freshman swim sessions to receive credit for the course. This requirement applies to all absences (excused or unexcused).

## HEALTH

## Grade: 9

12 Weeks
Health is a mandatory, planned 12 -week course for freshmen to assist each student in gaining an intelligent understanding of his body and mind in order to maintain good health and to couple this knowledge with a desire to achieve the highest degree of physical, mental, social and emotional wellness. This course includes anatomy and physiology to understand the structure and functions of the body. Mental health topics including personality development, stress management, understanding emotions and mental disorders are included. Practical information on all aspects of infectious diseases is investigated. Coverage is included in areas of drug and alcohol abuse and tobacco usage. Health courses also include information pertaining to H.I.V. and AIDS. Knowledge and skills for suicide prevention is also presented.
Health 9 will be taught in a 12-week cycle as part of the Freshmen Seminar course, which is mandatory for all ninth-grade students.

## CYBER HEALTH

## Grade: 9 <br> 12 Weeks

## . 25 Credit

Health is a mandatory, planned 12-week course for freshmen to assist each student in gaining an intelligent understanding of his body and mind in order to maintain good health and to couple this knowledge with a desire to achieve the highest degree of physical, mental, social and emotional wellness. This course includes anatomy and physiology to understand the structure and functions of the body. Mental health topics including personality development, stress management, understanding emotions and mental disorders are included. Practical information on all aspects of infectious diseases is investigated. Coverage is included in areas of drug and alcohol abuse and tobacco usage. Health courses also include information pertaining to H.I.V. and AIDS. Knowledge and skills for suicide prevention is also presented.
Health 9 will be taught in a 12-week cycle as part of the Freshmen Seminar course, which is mandatory for all ninth-grade students.

## Grades 10

.25 credit grade 9 / .5 credit grades 10
The objective of physical education is to educate the student physically, socially, emotionally, and mentally through physical activity. The program provides fundamental knowledge and skill that can be used to improve and maintain a healthy level of physical fitness. The program provides a person with physical strength, endurance, agility, balance, coordination and knowledge of sports and games. It also provides an understanding of the importance of exercise, carry-over activities that will be used throughout a person's lifetime, and high standards of sportsmanship and conduct. All ninth-grade students MUST take ten days of swimming in their freshmen year.
Ninth grade physical education will be taught in a 12-week cycle as part of the Freshmen Seminar course, which is mandatory for all ninth-grade students.
Freshman Health ( .25 credit) + Physical Education ( .25 credit $)=.5$ Credit
$10^{\text {th }}$ grade P.E.
*One total credit to graduate
HS0914C CYBER PHYSICAL EDUCATION
Grades 10
.25 credit grade 9 / .5 credit grades 10
The objective of physical education is to educate the student physically, socially, emotionally, and mentally through physical activity. The program provides fundamental knowledge and skill that can be used to improve and maintain a healthy level of physical fitness. The program provides a person with physical strength, endurance, agility, balance, coordination and knowledge of sports and games. It also provides an understanding of the importance of exercise, carry-over activities that will be used throughout a person's lifetime, and high standards of sportsmanship and conduct. All ninth-grade students MUST take ten days of swimming in their freshmen year.
Ninth grade physical education will be taught in a 12-week cycle as part of the Freshmen Seminar course, which is mandatory for all ninth-grade students. Freshman Health ( .25 credit $)+$ Physical Education $(.25$ credit $)=.5$ Credit $10^{\text {th }}$ grade P.E.
.5 credit each
*One total credit to graduate
HS0916 FITNESS ENHANCEMENT
Grade 11,12
(Maximum 2 credits)
Elective Credit .5

This semester course is an $11 / 12$ grade student fulfillment for the $1 / 2$ physical education. Fitness Enhancement students will report to the weight room for all course work. Students will participate in a modern approach to physical fitness including flexibility, strength training, aerobic activity for cardiovascular health, and core development. Students will create their own fitness plan and record results to encourage reaching their personal goals.

The program includes education and assessment in several areas of special education. Partners are given information in verbal as well as written form. Learning and understanding can be assessed through demonstration and participation. Members of the staff who are related to or work with individuals with disabilities can be included in the training to provide relevant information to the Partners. Partners will have the opportunity for hands-on experiences in the teaching process, as well as developing the knowledge and skills that promote wellness, sports training, and community physical recreation activities for all abilities. In addition, teachers have the opportunity to receive feedback about the course and gain data from the Partners regarding attitudes about individuals with disabilities, both prior to and after the course.

Pre-requisite - Recommendation from Current Physical Education Teacher.
School Credit - This course would fill the . 5 physical education credit required for graduation. This course is also eligible as a course elective.

Maximum registrations - This course would be restricted to 10 students per semester. Students can register for a full year option completing . 5 physical education credit and .5 elective. Maximum registration of students can be increased with recommendation from Physical Education Teacher.

HS0915 PHYSICAL EDUCATION ELECTIVE Grades 11, 12 (Maximum 2 credits) Elective credit . 5 grades 11, 12

The objective of physical education is to educate the student physically, socially, emotionally, and mentally through physical activity. The program provides fundamental knowledge and skill that can be used to improve and maintain a healthy level of physical fitness. The program provides a person with physical strength, endurance, agility, balance, coordination and knowledge of sports and games. It also provides an understanding of the importance of exercise, carry-over activities that will be used throughout a person's lifetime, and high standards of sportsmanship and conduct.

## HS0913 TEAM SPORTS <br> Grades 11, 12 <br> (Maximum 2 credits) <br> Elective credit . 5 grades 11, 12

The objective of team sports is to educate the student physically, socially, emotionally, mentally, and strategically through physical activity and collaboration in team sports games. The program provides fundamental knowledge and skill that can be used to improve and maintain a healthy level of physical fitness. The program provides a person with physical strength, endurance, agility, balance, coordination and knowledge to aid in competition or the possibility of officiating and coaching. It also provides an understanding of the importance of strategy, team work, team building, and high standards of sportsmanship and conduct.

HS0912 MINDFULNESS
(Maximum . 5 credits)
This course is an introduction to mindfulness. This course is designed for beginners to learn healthy stress relief strategies. Students will learn strategies to skillfully work with thoughts, emotions, and sensations, while developing their capacity to enhance mind-body awareness of present-moment experience. They will study theory and research in the field of mindfulness and the emerging science that shows promising, beneficial effects for physical and mental health and well-being. Classes consist of a combination of lecture, practice, and discussion.

## AIRFORCE JROTC

HS09001 Aerospace Science 100: Milestones in Aviation History $2^{\text {nd }}$
Grade 9, 10, 11, 12 One year - 5 periods

This is the recommended first AS course for all new cadets. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The intent of this textbook is to bring alive the significant discoveries in flight a reality. This book tells the story of why we are so proud of our Air Force heritage - laying the foundation for future Air Force JROTC aerospace science courses. Throughout the course 21st century learning is adopted with readings, video clips, hands-on learner centered activities, and chapter project-based learning opportunities.

## The Course Outcomes are:

1. Describe historical facts and impacts of the early attempts of heavier-than-air flight.
2. Analyze the impact World War I aviation had on commercial aviation.
3. Examine the role aerial bombing had on the outcome of World War II.
4. Investigate the impact commercial jet aviation has had on US travel.
5. Analyze the lessons learned from global use of US airpower.
6. Evaluate developing technology that will affect the US Air Force of the future.

## Aerospace Science: Cultural Studies: An Introduction to Global Awareness

This is a customized course about the world's cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force Junior ROTC programs. It introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Throughout the course, there are readings, video segments, hands-on activities, other optional activities, technology enrichment, and assessments to guide in the reinforcement of the materials. 21st century skills as defined by the Partnership for 21 st Century Skills are integrated into the course. These include learning and innovation (thinking) skills-critical thinking and problem solving, creativity and innovation, and communication and collaboration; information, media and technology skills-information literacy, media literacy, and ICT (information, communications and technology) literacy; and life and career skills-flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility.

## The course objectives are:

1. Know how historical, geographic, religious, and ethnic factors have shaped the six major regions of the world.
2. Know how economic, political, and social factors impact cultures.
3. Know how environmental resources influence global economic development.
4. Know how population density, famine, war, and immigration influence the world.
5. Know how the economic systems of communism and capitalism have shaped the six major regions of the world.
6. Comprehend how cultural perspectives of time, space, context, authority, interpersonal relationships, and orientation to community affect interactions among people.

## AFJROTC 300: Exploring Space: The High Frontier

One year - 5 periods
1 credit
This is a science course that includes the latest information available in space science and space exploration. The course begins with the study of the space environment form the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and on into modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The section on manned spaceflight focuses on the Space Shuttle, space stations and beyond, covering milestones in the endeavor to land on the Moon and to safely orbit humans and crafts for temporary and prolonged periods. The course covers the human aspect of spaceflight, focusing on the human experience in space. It also examines the latest advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

## The course objectives are:

1. Know the history of astronomy and the specific characteristics of the Earth, Moon, solar system, and the planets.
2. Comprehend the big picture of space exploration, including the history of spaceflight, organizations doing work in space, and the overall space environment.
3. Know the importance of entering space, characteristics of manned and unmanned spaceflight, and how humans are affected during spaceflight.
4. Know the key concepts for getting from the surface of the Earth into Earth orbit and to other planets and back again.
5. Know how spacecraft, rockets, and launch vehicles are designed and built.
6. Know the latest advances in space technology.

## AFJROTC 410: Survival:

One year - 5 periods

## 1 credit

The Survival text is a synthesis of the basic survival information found in Air Force Regulation 64-4 Survival Training. The survival instruction will provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. Survival also presents "good to know" information that would be useful in any situation. The information is just as useful to an individual lost hunting or stranded in a snowstorm.

## The course objectives are:

1. Know the elements of surviving.
2. Know how medicine procedures, clothing, and shelter can provide personal protection for a survivor in a survival situation.
3. Know the necessities for maintaining life in a survival situation.
4. Know how to travel and prepare for recovery in a survival situation.

## LEADERSHIP EDUCATION 100: TRADITIONS, WELLNESS, AND FOUNDATIONS OF CITIZENSHIP

LE 100 is the component of JROTC leadership education. It is intended for students who are entering the AFJROTC program and beginning their high school studies. It will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and exam the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. Lessons will cover how to be emotionally, mentally, and physically healthy. Avoiding and preventing violence in today's society will also be covered. How to recognize types of bullying and how to advocate for prevention of this type of behavior. It will cover healthy living, physical fitness, and how to make safe, drug-free, and responsible decisions. This textbook will also examine the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including a historical understanding of the American flag and other important national symbols. The final chapter will also cover how the US Constitution protects our rights and freedoms as American citizens.

Course Outcomes:

1. Analyze the heritage, organization, and tradition of service programs.
2. Analyze the benefits of positive personal behavior.
3. Evaluate healthy living through physical activity and good nutrition.
4. Apply safe, drug-free decisions.
5. Analyze the importance of citizenship in the United States

## Leadership Education 200: Communication, Awareness, and Leadership

Leadership Education 200 stresses communications skills and cadet corps activities. Much information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches compliment the academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects.

## Leadership Education 300: Life Skills and Career Opportunities

Life Skills and Career Opportunities, Second Edition provides an essential component of leadership education for today's high school students. This course it is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of
the $21^{\text {st }}$ century. Students will learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. This self-understanding will allow them to explore career paths and understand requirements that they will need to be successful at work and in life.
To help students increase their potential for success through education, they will learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They will learn how to prepare a winning résumé, and how to develop effective interviewing skills. Students will become more skilled at using the Internet for career research and learn how to network safely using social media. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration.

## Course Outcomes:

1. Analyze the elements of successful financial management skills.
2. Create a plan to safeguard personal resources.
3. Analyze the different ways of pursuing a career path.
4. Analyze the requirements for applying to a college or university.
5. Analyze positive and negative impact of college life in meeting career goals.
6. Evaluate the essential process for successfully pursuing desired career or job.
7. Evaluate the benefits of working for the Federal Government.
8. Create a plan for successful career development

## Leadership Education 400: Principles of Management

This is the 4th textbook in the Leadership Education series. This course provides exposure to the fundamentals of management. The text contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. We are confident this course, coupled with what cadets have already learned during their time in AFJROTC, will equip them with the qualities needed to serve in leadership positions within the corps. Throughout the text are many ethical dilemmas, case studies, and role play activities built into the lessons. These activities are based on real life experiences and will allow students the opportunity to practice what they learn by getting involved in discussions and expressing their opinions.

Course Outcomes:

1. Analyze management and its application to JROTC.
2. Analyze the elements of project management.
3. Evaluate the importance of formal planning within an organization.
4. Analyze decision making within an organization.
5. Evaluate time management and change management within an organization.
6. Analyze concerns managers must consider in managing individuals and groups.
7. Analyze the factors that make work teams productive.
8. Evaluate the interpersonal skills of delegating, negotiating, and mentoring

## Wellness Curriculum

## Course Description

Wellness is an official part of the Air Force Junior ROTC program. It is an exercise program focused upon individual base line improvements with the goal of achieving a national standard as calculated with age and gender. Cadets will participate in the Presidential and National Physical Fitness Award Programs consisting of exercises including curl-ups, shuttle-run, one-mile run/walk, pull ups and V-Sit reach. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communities. The program is provided as a tool to help develop individualized training programs for cadets. Cadets will be given the opportunity to put into practice the wellness concepts that are taught in Leadership Education I. Instructors also include other activities cadets enjoy such as team sports in order to keep the Wellness Program fun and motivating. The exercises develop all muscle groups and provide sufficient anaerobic and aerobic intensity. They require no equipment and use only body weight.

## $\underline{\mathbf{1 2}^{\text {TH }} \text { GRADE MISC. OPPORTUNITES }}$

## Application \& Qualification Required

## Emerging Leaders Program Description:

- Free, income-based workforce development and career readiness program for high school seniors.
- ELP participants will attend session during the school day where they are instructed in a curriculum specifically created for seniors to prepare them for success after high school.
- Students receive help with post-graduation goals, career planning, and college/postsecondary training preparation.
- Outside of the classroom, participants work one-on-one with a Youth Development Associate (YDA) to receive highly individualized attention and support in their pursuit of their goals. They create goal plans and refer to the plans throughout the year to stay on track.
- Features career exploration, job shadowing, leadership development and team building, job/school/training searches, field trips to various job sites and schools, and more.
- A variety of professionals present to the class throughout the year on their career fields and personal development.
- Students will earn a modest stipend periodically based on participation and goal completion throughout the school year and post-graduation.


## HS0999 <br> CAREER INTERNSHIP

Grades 11, 12
The Career Internship provides juniors and seniors the opportunity to leave high school when their required daily classes are complete to work their part-time job(s) and earn elective credit(s) for that job. Students must re-enroll each 9 weeks with specific information from their employer(s), and an evaluation must be filled out by the student's immediate supervisor(s) or manager(s) each 9 weeks. Site visits to the student's work site may be conducted as needed. Students must remain in school for a minimum of 4 periods each day and are required to have a lunch. Students must sign out in the office and leave the building at their scheduled time each day. Transportation is the sole responsibility of the student and family. A signed parental permission form is required each 9 weeks.

Dual Enrollment enables Junior and Senior students to get a head start on their college careers by earning college credits while still in high school. Many students enjoy experiencing a college setting as they finish their junior and senior years. Credits earned under the provisions of this program can meet high school graduation requirements as well as college credits which may be transferred to other post-secondary institutions. West Mifflin Area High School currently has Dual Enrollment agreements with CCAC, Penn State, Point Park, and Chatham University. All costs and transportation are the sole responsibility of the student and family. Dual Enrollment classes can be taken in the evening or during the school day if the student's schedule allows such flexibility.

HS0995 STUDENT SECRETARY
One year - 5 Periods

Grade 12 1 Credit

This elective course provides students with a clear impression of employee/employer relationships through assistance to the faculty and administration of West Mifflin Area High School. This course is to provide members with valuable experience, preparing them for a career in the academic and professional world, and to put to good use these acquired talents and experiences. Students are required to attend meetings, show excellent attendance, adhere to the rules of the organization, and complete a term paper to obtain credit for the course. Students need to register for the course during scheduling, and apply for the club at the end of the school year for the sake of assigning a teacher to intern for during their senior year.

## HS0999 SCHOOL TO WORK PROGRAM

 9 weeks to One YearGrade 11,12
.25 credits earned per nine weeks
The school-to-work program allows high school juniors and seniors the opportunity to earn elective credits for jobs they perform outside of the school setting. Upon submitting the required documentation and confirmation of employment, the student can earn $1 / 4$ credit per 9 -week grading period. A maximum of 1 elective credit per year may be awarded for maintaining a job while enrolled as a student at the high school.

## HS0991 SERVSAFE

Grade: 12
One Semester
. 5 Credit
$12^{\text {th }}$ grade students who are working towards an industry recognized credentialization. Students will prepare for and test to earn the ServSafe Industry Certification: Provide and assess knowledge of basic safe food handling procedures. Individuals who receive a ServSafe Food Handler Certificate have successfully completed a Food Handler Course and have basic knowledge of the topics covered in the areas of Basic food safety, personal hygiene, cross contamination and allergens, time and temperature control, and cleaning and sanitation.
$12^{\text {th }}$ grade students who are working towards an industry recognized credentialization. Students will prepare for and test to earn the OSHA10 Certification. General \& Healthcare Industry Outreach Training Program is intended to provide an entry-level general industry worker's broad awareness on recognizing and preventing hazards on a general industry site. Students will be introduced to OSHA policies, procedures, and standards as well as general industry safety and health principles and work practices covered in OSHA Act Part 1910. Special emphasis will be placed on areas most hazardous using OSHA standards as a guide. Upon successful completion of the course, participants will receive an OSHA 10-Hour General \& Healthcare Industry Outreach DOL course completion card.

# CAREER MAJORS (CIP CODES) 

Steel Center offers 18 career majors. Each major is based on state and/or locally approved curricula, inclusive of written (theoretical) activities, performance tasks, demonstration of work ethic, and professionalism. For each major, students may earn three (3) or more Carnegie Units (credits) per year, depending on local sending school district policies for credit acquisition. Students may also earn industry certifications and college credit in their respective programs. Steel Center's career majors are as follows, listed alphabetically by local title and accompanied by Pennsylvania Classification of Instructional Program (CIP) codes:

Advertising \& Design (Program of Study)
Grades 10-12
CIP Code: 50.0402, 3 or more credits/year.

Industry Certifications Available: Adobe Certified Associate Photoshop, InDesign, Illustrator, Adobe Premier Pro, OSHA 10 Hour Training CareerSafe \& Pennsylvania Skills Certification

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

Automotive Technology (Program of Study)
Grades 10-12
CIP Code: 47.0604, 3 or more credits/year.

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

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

Specialized classroom and practical work experiences associated with the preparation of breads, crackers, cakes, pies, pastries and other bakery products for retail distribution, for consumption in a commercial food service establishment or for special functions. Instruction includes making, freezing and handling of bake products; decorating; counter display; and packaging of merchandise. This is a comprehensive program to prepare individuals for employment in a variety of occupations in the baking industry.

## Building Trades Maintenance (Program of Study)

Grades 10-12
CIP Code: 46.0401, 3 or more credits/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA), OSHA-10 Hour Training CareerSafe, Forklift Operator, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single and Extension Ladder \& Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to serve a variety of structures including commercial and industrial buildings and mobile homes. Instruction includes the basics of carpentry, millwork, plumbing, painting, glazing, electricity, plastering, welding, minor sheet metal, concreting, bricklaying, tile setting, hardware usage, heating, ventilation, waterproofing, roofing and record keeping.

## Carpentry (Program of Study)

Grades 10-12
CIP Code: 46.0201, 3 or more credits/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA), OSHA 10 Hour Training CareerSafe, Forklift Operator, S/P2 Construction Safety, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single and Extension Ladder, Stop the Bleed \& Pennsylvania Skills Certification

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

## Collision Repair and Refinishing (Program of Study)

Grades 10-12
CIP Code: 47.0603, 3 or more credits/year.

Industry Certifications Available: S/P2 Collision Safety, \& Pennsylvania Skills Certification

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

Cybersecurity and Networking Technology (Program of Study)
Grades 10-12
CIP Code: 11.0901, 3 or more credits/year.

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

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

## Cosmetology (Career \& Technical Program)

Grades 10-12
CIP Code: 12.0401, 3 or more credits/year.

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

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

## Culinary Arts (Program of Study) <br> CIP Code: 12.0508, 3 or more credits/year.

Grades 10-12

Industry Certifications Available: ServSafe Manager Food Safety, ServSafe Food Handler, ServSafe Allergen, S/P2
Culinary Safety \& Pennsylvania Skills Certification

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

## Electrical Construction (Program of Study)

Grades 10-12
CIP Code: 46.0399, 3 or more credit/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA), OSHA 10 Hour Training
CareerSafe \& Pennsylvania Skills Certification

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

## Health Assistants (Program of Study)

Grades 10-12
CIP Code: 51.0899, 3 or more credits/year.

Industry Certifications Available: Patient Care Technician/PCT, Basic Life Support Health Care Providers, \& Pennsylvania Skills Certification

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

## Heating, Ventilation, Air Conditioning \& Refrigeration (Program of Study)

Grades 10-12
CIP Code: 47.0201, 3 or more credits/year.

Industry Certifications Available: EPA 608 Technician Certification, Section 609 Certification for Refrigerant Recycling and Recovery, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single and Extension Ladder, Pennsylvania Builder's Association Certification (PBA), OSHA 30 Hour Training CareerSafe \& Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions; overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems.

Industry Certifications Available: Basic Life Support (BLS), Pharmacy Technician (CPhT), Phlebotomy Technician \& Pennsylvania Skills Certification

An instructional program that prepares individuals to apply knowledge and skills in the health occupations. Instruction is provided in the basic skills in a variety of areas associated with health occupations such as health and medical services, pharmaceutical and medical instruments and supplies. Instruction includes but is not limited to foundations of health (medical terminology); anatomy and physiology; legal, ethical and economic aspects of health care; clinical laboratory procedures; basic health occupational skills; aseptic techniques; OSHA regulations; and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

## Public Safety (Career \& Technical Program)

Grades 10-12 CIP Code: 51.0904, 3 or more credits/year.

Industry Certifications Available: Emergency Medical Technician, National Incident Management System, Basic Life Support CPR, Stop the Bleed, American Ladder Institute-Articulated Ladder, Mobile Ladder, Single and Extension Ladder \& Hazardous Materials Response Awareness

A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in prehospital settings and to supervise ambulance personnel. Students will learn about basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations. Students will also learn fundamentals of police operations and fire protection, as well as technical and vehicle rescue. Physical development and self-confidence are emphasized due to the nature of the specific occupation(s) associated with public safety.

## Sports Medicine \& Rehabilitation Professions (Career Technical \& Program) CIP Code: 51.2604, 3 or more credits/year.

Grades 10-12

Industry Certifications Available: Basic Life Support CPR, First Aid, OSHA Healthcare Safety, OSHA 10 Hour Training CareerSafe \& Pennsylvania Skills Certification

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

Veterinary Assistant (Career \&Technical Program)
Grades 10-12
CIP Code: 01.8301, 3 or more credits/year.

Industry Certifications Available OSHA-10 Hour Health Care Safety, Red Cross Pet Tech First Aid, Purina Weight Coach, Fear Free \& Pennsylvania Skills Certification

An instructional program that prepares individuals to support veterinarians by providing assistance during animal examinations, treatment administration and monitoring; by keeping animal and related health record information; and by performing a range of selected practice-related duties. This program is designed to provide instruction in preparing the animal for examination and treatment, sterilizing equipment and performing selected routine laboratory procedures under direct supervision of the veterinarian. Instruction also includes maintaining medical and business records, charting and scheduling activities and a wide range of practice- related duties as applied to animal health care, the biomedical field and the pet industry. The health occupational planned courses include the study of life sciences with emphasis on animal anatomy, physiology, diseases, reproduction, genetics, nutrition, animal laboratory procedures, aseptic technique, OSHA regulations, infection control and procedures. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

Welding (Program of Study)
Grades 10-12
CIP Code: 48.0508, 3 or more credits/year.

Industry Certifications Available: AWS Certification, SP/2 Welding Safety, OSHA 10 Hour Safety, \& Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders and chemical baths for surface cleaning; positioning and clamping; and welding standards established by the American Welding Society, American Society of Mechanical Engineers and American Bureau of Ships.


[^0]:    **YOU MUST PASS INTRODUCTION TO ART WITH A "C "OR BETTER TO PURSUE UPPER LEVEL ART CLASSES**

[^1]:    **YOU MUST PASS A 2 ${ }^{\text {nd }}$ LEVEL ART CLASS AND GRAPHICS 1 WITH A "B "OR BETTER \& HAVE TEACHER RECOMMENDATION TO PURSUE THIS UPPER LEVEL CLASS**

