

## Pocono Mountain School District

## High School Progrram of Studies

 2023-2024 Catalog
www.pmsd.org

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# THE MISSION OF THE POCONO MOUNTAIN SCHOOL DISTRICT IS TO PREPARE ALL STUDENTS FOR TOMORROW'S CHALLENGES AND OPPORTUNITIES. 

THE POCONO MOUNTAIN SCHOOL DISTRICT MISSION AND PRACTICE

The Pocono Mountain School District provides an exemplary educational program for the children of our District that includes instruction in all academic areas relevant to their preparation for the future. Pocono Mountain School District is a strong academic community where students build confidence to be college and career ready. All students and staff are active learners engaged in meaningful experiences that promote mutual respect, trust, and character. To promote increased student achievement, Pocono Mountain has developed a rigorous and comprehensive curriculum that is aligned to Pennsylvania State Standards in all core content areas. A rigorous and relevant curriculum is one that is cognitively demanding and challenging to students as they apply the essential concepts and skills to real world, complex and open-ended situations. The content is not just interesting to students, but involves particular intellectual challenges. An extensive variety of after school activities in the arts, academics and athletics are provided to enrich our students as well.

The $21^{\text {st }}$ Century high school is about more than just the acquisition of credits. Students should begin planning for their post-secondary success even before they enter high school. As students begin their scheduling process for their ninth-grade year, counselors will work closely with students to chart a successful path which, if successfully completed, will give students a competitive advantage when applying to the college or career of their choice.

For those students who wish to accelerate their high school experience and graduate from high school with some college credits in hand, the Pocono Mountain School District offers a wide variety of Advanced Placement and dual enrollment opportunities. Students wishing to participate in a more challenging curriculum may choose from a number of honors courses in each of the major content areas. Some students may wish to begin their career training while in high school. The Pocono Mountain School District, in partnership with the Monroe Career and Technical Institute (MCTI), offers students industry-benchmarked training in high-priority occupations.

We are partners in each student's educational experience. Providing each student with a flexible, personalized learning plan will ensure success beyond high school.

# KEYSTONE EXAM PROFICIENCY AND GRADUATION REQUIREMENTS 

Improving academic performance for all children is an essential part of Pennsylvania's educational system. The Commonwealth of Pennsylvania established academic standards that define what students should know and be able to do at specific grade levels. Standards provide a framework and learning targets for students, teachers, and parents. Progress toward the Standards is measured through a state assessment called the Keystone Exams. Keystone Exams in Literature, Algebra I, and Biology will be administered after the completion of the Keystone related course. These exams serve a dual purpose as both graduation requirements and for state accountability under federal law (ESSA, Future Ready Index, School Performance Profile/ Educator Effectiveness Model).

Students must demonstrate their ability to meet or exceed the academic standards at a proficient or advanced level. The Pocono Mountain School District uses its own assessment system as well as the Keystone Exams to measure students' proficiency. In addition, to be eligible for high school graduation all students must complete 22 credits.

Students who meet the prerequisites may earn graduation credit for Algebra I, French, German, and Spanish when taken in the seventh or eighth grade. These credits will be utilized in calculation of class rank and grade point average.

For each successful year of participation at the Monroe Career and Technical Institute, students will receive three (3) credits.

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 satisfactory composite score 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).

The State Board of Education approved the satisfactory composite score of 4452 .

- Alternate Assessment Pathway: Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and one of the following:
- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB);
- Gold Level on the ACT WorkKeys Assessment;
- Attainment of an established score on an Advanced Placement Program or an International Baccalaureate Diploma Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve at least a proficient score;
- Successful completion of a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;
- Successful completion of a pre-apprenticeship program; or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.
- Evidence Based Pathway: Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and demonstration of three pieces of evidence consistent with the student's goals and career plans, including one of the following:
- Attainment of an established score on the ACT WorkKeys assessment, a SAT subject test, an Advanced Placement Program Exam, or an International Baccalaureate Diploma Program Exam;
- Acceptance into 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; 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.

Act 158 Pathway Graphic

| Keystone Proficiency Pathway |  |  |
| :---: | :---: | :---: |
| Proficient or Advanced in Algebra I | Proficient or Advanced in Biology | Proficient or Advanced in Literature |
| Keystone Composite Pathway |  |  |
| At least 1 Keystone score is Proficient or Advanced | No score is Below Basic | Composite Keystone Score is $\mathbf{4 4 5 2}$ or Greater |
| CTE Concentrator, Alternative Assessment, and Evidence Based Pathways |  |  |
| Meet local grade-based requirements for Keystone content in which student is less than Proficient |  |  |
|   <br> Career \& Technical Education Alternative Assessment <br> -1 Piece of Evidence -1 Piece of Evidence <br> Evidence Based <br> - 3 Pieces of Evidence <br> consistent w/student goals <br> ONE or more from the first seven No more than TWO from the last five |  |  |
| -Industry-based competency certification <br> -Likelihood of industry-based competency assessment success <br> -Readiness for continued engagement in Career and Technical Education (CTE) Concentrator program of study | - Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010) <br> - Attainment of Gold Level or better on ACT WorkKeys <br> - Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient <br> - Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient <br> - Successful completion of concurrent course(s) related to each Keystone content area in which less than Proficient <br> - Successful completion of a preapprenticeship program <br> - Acceptance into 4yr Institution of Higher Education (IHE) for college-level coursework | - Attainment of 630 or better on any <br> SAT Subject Test <br> - Attainment of Silver Level or better on ACT WorkKeys <br> - Attainment of 3 or better on any AP Exam <br> - Attainment of 3 or better on any IB Exam <br> - Successful completion of any concurrent or postsecondary course <br> - Industry-recognized credentialization <br> - Acceptance into an other-than-4yr Institution of Higher Education (IHE) for college-level coursework <br> - Attainment of Proficient or Advanced on any Keystone Exam <br> -Successful completion of a servicelearning project <br> - Letter guaranteeing full-time employment or military enlistment <br> - Completion of an internship, externship, or cooperative education program <br> - Compliance with NCAA Division II academic requirements |

## CAREER READINESS INDICATOR FOR FUTURE READY PA INDEX

## Background

According to the Pennsylvania Department of Education, the Future Ready PA Index is:

- A more holistic tool for communities to measure school success.
- Less reliant on point-in-time standardized test scores.
- Comprehensive measures that value a school's efforts to help all students learn, grow, and succeed in the classroom and beyond.
As part of the Every Student Succeeds Act (ESSA), there are six (6) Federal Accountability Indicators:

1. \% Proficient / Advanced on PSSA/Keystone Exams
2. Meeting Annual growth Expectations (PVAAS)
3. English Language Proficiency
4. Graduation Rate
5. Career Standards / Readiness
6. Chronic Absenteeism

Of the six indicators, four are mandated by the Federal Department of Education and two were selected by the Pennsylvania Department of Education.

## Career Readiness Indicator

- Ensures that all students have access to career exploration and preparation activities that are standardsaligned and evidence-based.
- Percent of students who demonstrate meaningful engagement in career exploration and preparation and implementation of individualized career plans through separate, specific measures based on gradelevel benchmarks aligned to the Pennsylvania Career Education and Work (CEW) Standards.
- The percentage of students who, by the end of GRADE 5, demonstrate engagement in career exploration and preparation aligned to the CEW standards via PA Career Zone or a locally designed career exploration and preparation program/curriculum.
- The percentage of students who, by the end of grade 8 , create an individualized career plan and participate in career preparation activities aligned to the CEW Standards.
- The percentage of students who, by the end of grade 11, implement their individualized career plan through ongoing development of a career portfolio and participation in career preparation activities aligned to the CEW Standards.


## Career Portfolios

By the end of grades 5, 8, and 11, students will have to produce a variety of items/evidence aligned to the 4 strands in the CEW Standards that demonstrate their awareness and understanding of the standards. Monitoring of these portfolios will occur through the Department of Education.

## Career Portfolio Evidence/Components

| By end of Grade 5 | By end of Grade 8 | By end of Grade 11 |
| :---: | :---: | :---: |
| - 6 pieces of evidence | - Student has a career portfolio containing the $K-5$ evidence <br> - Additional 6 pieces of evidence | - Student has a career portfolio containing the K-5 and 6-8 grade band evidence <br> - Additional 8 pieces of evidence collected in grades 9-11 |
| - 2 per year, per | - 2 per year, per grade level | - 2 per year per grade level |
| grade level | - At least 1 piece of evidence per CEW Strand | - At least 1 piece of evidence per CEW Strand <br> - At least 2 pieces of evidence for the 9-11 grade band |
| - At least 1 piece of evidence per CEW | - One of the pieces of evidence for the 6-8 band must be the | demonstrate implementation of the student's individualized career plan |
| Strand | student's individualized career | - PMSD Grade 9-11 Career Readiness Indicators |

## KEYSTONE TUTORIAL COURSE

A Keystone Tutorial Course will be required for students who do not demonstrate proficiency on the Literature, Algebra I, and/or Biology Keystone Exams.

By the end of grade 12, students must demonstrate proficiency on each Keystone exam or successful completion of the Keystone Tutorial. This is a local school board requirement for graduation.

## ACADEMIC STANDARDS DEMONSTRATION

Completion of a course sequence is the recommended process for demonstrating academic standards attainment. Other ways to demonstrate academic standards attainment are:

- Complete standards by meeting the goals of an Individual Education Plan (I.E.P.)
- Complete standards when the student is in a pre-approved foreign exchange program (NOTE: student standard completion will be evaluated upon the student's return to school)


## SCHEDULING LIMITATIONS

A full schedule in the high school consists of 30 class periods a week. Students must schedule all class periods. Many courses mandate specific requirements. The number of students electing a course and the availability of teachers will determine whether or not a course will be offered. In these cases, students may be assigned to their other choices.

## REPEATED COURSES

Pocono Mountain School District does not allow students to repeat a course that the student has attempted, completed, and earned a numeric and/or letter final grade, regardless of grade earned.

If a student were to attempt a course and not meet the requirements to earn credit in the course, the student is allowed to attempt and complete a credit recovery course to earn credit. The highest grade that the student will be awarded for the credit recovery course is $65 \%$. That credit recovery grade will not be factored into the student's overall grade point average. Earning a passing grade of $65 \%$ in a credit recovery course is utilized only for the student to meet the local PMSD credit requirements for graduation.

## 2023-2024 COURSE SEQUENCING GUIDE

## CORE COURSE SEQUENCES

## HONORS

The Pocono Mountain School District provides Honors courses for students with high academic potential. Due to the demands of these courses, weighted grades are used to acknowledge student achievement. The AP programs follow the College Examination Board standards. The content of these courses is predetermined and students are encouraged to take the AP test that most colleges recognize and use to determine placement in their programs.

| Grade | English Language Arts (ELA) | Mathematics | Science | Social Studies | $\begin{gathered} \text { World } \\ \text { Language } \\ \text { (not a core course) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Honors | Honors Geometry | Honors Biology | Elective <br> *AP Human Geography |  |
| 10 | Honors | Honors Algebra II | Honors Chemistry *AP Biology | Honors Civics <br> *AP US History <br> *AP European History <br> *AP Psychology <br> *AP Human Geography <br> *AP World History | Honors <br> *Spanish IV <br> *French IV <br> *German IV |
| 11 | Honors <br> *AP Language \& Composition | Honors PreCalculus | Honors Physics Honors Earth Science <br> *AP Biology <br> *AP Chem | Honors Modern US <br> History <br> *AP European History <br> *AP US History <br> *AP Psychology <br> *AP Human Geography <br> *AP World History | *AP Spanish <br> *AP French <br> *AP German |
| 12 | Honors <br> *AP Language \& Composition <br> *AP Literature \& Composition | Honors Calculus <br> *AP Calc AB <br> *AP Calc BC <br> *AP Statistics | *AP Biology <br> *AP Physics <br> *AP Chem | Honors World History <br> *AP European History <br> *AP US History <br> *AP Psychology <br> *AP Human Geography <br> *AP World History | *AP Spanish <br> *AP French <br> *AP German |

## ACADEMIC

The academic program will prepare students to demonstrate mastery of all graduation standards through both theoretical and hands-on applications. This program will stress the discovery of scientific principles, the development of mathematical proofs, the rationale of literary criticism, and the understanding of principles of the social sciences. The academic program is designed to prepare students to enter a post-secondary education.

| Grade | English Language <br> Arts (ELA) | Mathematics | Science | Social Studies |
| :---: | :---: | :--- | :--- | :--- |
| 9 | Academic ELA 9 | Academic Algebra I | Biology | Elective |
| 10 | Academic ELA 10 | Academic Geometry | Chemistry | Civics |
| 11 | Academic ELA 11 | Academic Algebra II | Physics or Earth | Academic Modern US History |
| 12 | Academic ELA 12 | Academic PreCalculus | Elective | Academic World History |

## CORE CLASSES

The program will prepare students to demonstrate mastery of all graduation standards. In this curriculum, students will be asked to use their knowledge to solve real and/or simulated problems. Hands-on applications in science, mathematics, English language arts and problem solving will be emphasized. This program will prepare students to enter post-secondary schools or the work force.

| Grade | English Language <br> Arts (ELA) | Mathematics | Science | Social Studies |
| :---: | :--- | :--- | :--- | :--- |
| 9 | Academic ELA 9 | Algebra IA | Contemporary Integrated | Elective |
| 10 | Academic ELA 10 | Algebra IB/Algebra IB <br> Enhancement | Biology | Civics |
| 11 | Academic ELA 11 | Algebra II | Earth Science or General | Modern US History |
| 12 | Academic ELA 12 | Geometry | Elective | World History |

## NCAA ATHLETIC ELIGIBILITY

Students seeking to participate in college level athletics must meet academic eligibility requirements established by the National Collegiate Athletic Association (NCAA). It is important for student-athletes to be aware of the classes they choose to fulfill eligibility requirements. Please refer to the Academic Requirements on pages 14-19.

As of January 2023, standardized test scores are not required for all student-athletes who initially enroll full time on or after August 1, 2023. Students should also check with the NCAA school they plan to attend regarding whether standardized test scores are necessary for admission or scholarship requirements.

As a student-athlete, the NCAA and college admission professionals expect students to compare their course selections and high school transcripts to the NCAA requirements. A worksheet to assist parents and students with eligibility requirements is available on the NCAA website: www.ncaa.org. This site also includes the link to register with the NCAA in the student's junior year of high school.

This Program of Studies indicates which PMSD core courses count towards NCAA eligibility at the time this document went to print. However, the NCAA retains the right to make changes to the approved list at any time without advanced notification. The courses that may count toward NCAA eligibility are noted in the course title as (NCAA).

## ONE OPPORTUNITY. LIMITLESS POSSIBILITIES.

If you want to compete in NCAA sports, you need to register with the NCAA Eligibility Center at eligibilitycenter.org. Plan to register before your freshman year of high school (or year nine of secondary school). Visit on.ncaa.com/RegChecklist to help guide you through the registration process.

## ACADEMIC REQUIREMENTS

To study and compete at a Division I or II school, you must earn 16 NCAA-approved core-course credits, earn a minimum 2.3 (Division I) or 2.2 (Division II) core-course GPA and submit your final transcript with proof of graduation to the Eligibility Center.

## CORE-COURSE REQUIREMENTS

## DIVISION I

Earn 16 NCAA-approved core-course credits in the following areas:


For Division I, 10 of your 16 NCAA-approved core-course credits must be completed before the start of your seventh semester, including seven in English, math or science.

## DIVISION II

Earn 16 NCAA-approved core-course credits in the following areas:


3 years


2 years


2 years


3 years


2 years


4 years

## GRADE-POINT AVERAGE

The Eligibility Center calculates your core-course GPA based on the grades you earn in NCAA-approved core courses.
» Division I requires a minimum 2.3 core-course GPA.
» Division II requires a minimum 2.2 core-course GPA.

## DIVISION III

While Division III schools set their own admissions and academic requirements, international student-athletes (first-year enrollees and transfers) who initially enroll full time at a Division III school on or after Aug. 1, 2023, are required to complete an Amateurism-Only Certification account. Contact the Division III school you plan to attend for more information about its academic requirements.
*More information regarding the impact of COVID-19 can be found at on.ncaa.com/COVID19_Spring2023.



## TEST SCORES

In January 2023, NCAA Divisions I and II adopted legislation to remove standardized test scores from initial-eligibility requirements. Check with the NCAA school you plan to attend regarding whether standardized test scores are necessary for admission or scholarship requirements.

* More information regarding the impact of COVID-19 can be found at on.ncaa.com/COVID19_Spring2023.


## CORE-COURSE LIST

Find your high school's list of NCAA-approved core courses at eligibilitycenter.org/ courselist. No core-course list means courses taken from that high school will not count for NCAA eligibility. If your high school does not have a list, you risk being ineligible to play in college.

## NONTRADITIONAL AND ONLINE COURSES

Nontraditional courses are taught online or through distance learning, hybrid/blended, independent study, individualized instruction, correspondence or similar means.

These types of courses may be acceptable for use in the NCAA initial-eligibility certification process; however, it is important to make sure the nontraditional program has been approved and appears on your school/program's list of NCAA-approved core courses.

## be Ahead OF THE GAME

"Plan to register with the NCAA Eligibility Center at eligibilitycenter.org before your freshman year of high school. Visit on.ncaa. com/RegChecklist to help guide you through the registration process.
" After six semesters of high school, ask your high school counselor from each school you have attended to upload an official transcript to your Eligibility Center account.

## ADDITIONAL RESOURCES

" Dll Academic Requirements flyer.
» DIII Amateurism flyer.
" International Initial-Eligibility flyer.


## DIVISION II ACADEMIC REQUIREMENTS

To study and compete at a Division II school, you must earn 16 NCAA-approved core-course credits, earn a minimum 2.2 core-course GPA and submit your final transcript with proof of graduation to the Eligibility Center.

## CORE-COURSE REQUIREMENTS

Earn 16 NCAA-approved core-course credits in the following areas:

3 years

2 years

2 years

3 years

2 years


## QUALIFIER

As a Division II qualifier, you may practice, compete and receive an athletics scholarship during your first year of full-time enrollment at an NCAA Division II school.
» Earn 16 NCAA-approved core-course credits in the right areas.
» Earn a minimum 2.2 core-course GPA.
" Submit your final transcript with proof of graduation to the Eligibility Center.

## PARTIAL QUALIFIER

If you have not met all of the Division II academic standards, you will be deemed a partial qualifier. As a partial qualifier, you may practice and receive an athletics scholarship, but may NOT compete, during your first year of full-time enrollment at an NCAA Division II school.

* More information regarding the impact of COVID-19 can be found at on.ncaa.com/COVID19_ Spring2023.


## TEST SCORES

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Find your high school's list of NCAA-approved core courses at eligibilitycenter.org/courselist. No core-course list means courses taken from that high school will not count for NCAA eligibility. If your high school does not have a list, you risk being ineligible to play in college.

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Nontraditional courses are taught online or through distance learning, hybrid/blended, independent study, individualized instruction, correspondence or similar means.

These types of courses may be acceptable for use in the NCAA initialeligibility certification process; however, it is important to make sure the nontraditional program has been approved and appears on your school/program's list of NCAA-approved core courses.

## BE AHEAD OF THE GAME

»Plan to register with the NCAA Eligibility Center at eligibilitycenter.org before your freshman year of high school. Visit on.ncaa.com/RegChecklist to help guide you through the registration process.
» After six semesters of high school, ask your high school counselor from each school you have attended to upload an official transcript to your Eligibility Center account.
»For more information on Division II, visit ncaa.org/D2.

## ADDITIONAL RESOURCES

» DI Academic Requirements flyer.
》 DIII Amateurism flyer.
» International Initial-Eligibility flyer.


## 2023-24 DIVISION III ACADEMIC REQUIREMENTS

## DIVISION III AMATEURISM

## CERTIFICATION REQUIREMENTS

International college-bound student-athletes (first-year enrollees and transfers) who initially enroll full time at an NCAA Division III school on or after Aug. 1, 2023, must have their amateur status certified by the NCAA Eligibility Center. (Academic documents may be requested to establish your official graduation timeline for amateurism certification purposes.)

## ADDITIONAL INFORMATION

You must be on a Division III school's institutional request list before your certification will be started.

## START YOUR AMATEURISM CERTIFICATION IN THREE EASY STEPS!

## CREATE YOUR ACCOUNT

International student-athletes (first-year enrollees and transfers) planning to study and compete at a Division III school are required to complete an Amateurism-Only Certification account with the Eligibility Center.

ENTER YOUR INFORMATION
When you register for an Amateurism-Only Certification account with the Eligibility Center, you will be asked a series of questions about your sports participation to determine your amateur status. In some instances, the Eligibility Center may need to gather additional information to evaluate your amateur status.

REQUEST YOUR FINAL AMATEURISM CERTIFICATION
You must request your final amateurism certification through your Eligibility Center account; the Eligibility Center cannot finalize your amateurism certification without your request. You can request your final amateurism certification even if other tasks are still open in your account. When you can request your final amateurism certification depends on when you are initially enrolling full time at a Division III school:

Fall Enrollment: If you are initially enrolling at a Division III school in the fall semester, you may request a final amateurism certification on or after April 1 prior to enrollment.

Winter/Spring Enrollment: If you are initially enrolling at a Division III school in the spring semester, you may request a final amateurism certification on or after Oct. 1 prior to enrollment.

## Want more DIII information? Visit ncaa.org/d3.

## ADDITIONAL PROGRAMS

## MONROE CAREER \& TECHNICAL INSTITUTE (MCTI)

The career and technical program begins in the tenth grade. Competitive admission quotas make it necessary for applicants to have a record of good conduct, attendance, and passing grades in their academic subjects before their application can be processed. (See Appendix-pg. 118)

## DIVERSIFIED OCCUPATIONS

The Diversified Occupations Program is a work-study program that is designed to combine classroom instruction with on-the-job training in a career area of the student's choice. Students are responsible for finding part-time employment with a local employer. Students are encouraged to find jobs that are directly related to the career field they wish to pursue after graduating from high school.

The Diversified Occupations Program is a partnership between the home school, MCTI, the employer, the student and the student's parents. This training program is designed to help the student transition from school to the world of work while gaining valuable life and work experience. This program is conducted at the student's district high school campus.

## PATHWAYS TO EXCELLENCE CAREER EDUCATION <br> (Graduation Requirement)

The 9-12 guidance career education curriculums are based on the American School Counselor Association National Standards. Students will acquire skills to investigate the world of work in relation to knowledge of self and to make informed career decisions. They will complete career assessments and use computer technology to research careers, colleges, trade schools and the military. Resume writing, interviewing skills, college application process and financial aid will be discussed. The program grade level focus will be as follows:

- $9^{\text {th }}$ grade - Career Awareness
- $10^{\text {th }}$ grade - Career Exploration
- $11^{\text {th }}$ grade - Career Planning
- $12^{\text {th }}$ grade - Career Implementation


## CONCURRENT ENROLLMENT

A senior can elect to participate in the concurrent enrollment program if they meet the following criteria:

- Enrolled in the concurrent enrollment program at any school in agreement with PMSD (check with the guidance department)
- A copy of the student's concurrent enrollment registration must be submitted to the student's guidance counselor
- Student must submit an official transcript from the college attended


## SPECIAL EDUCATION

## PHILOSOPHY

The Pocono Mountain School District is committed to setting high standards for all students receiving Special Education services. Special Education supports and services in the Pocono Mountain School District include a full continuum of services and are in compliance with federal and state laws.

Every student in the Pocono Mountain School District is provided an educational program that fosters independence and success to transition successfully to post-secondary education or the workforce. Students are provided access to the general education curriculum with specially designed instruction based on the student's individual strengths and needs. An alternative curriculum/program will be provided, if and when appropriate, based on the student's individual strengths and needs.

## GIFTED EDUCATION

## PHILOSOPHY

Pocono Mountain School District is committed to providing quality Gifted Education supports and services, which encompass the following objectives: expansion of academic attainments and intellectual skills; stimulation of intellectual curiosity, independence and responsibility; development of originality and creativity; development of a positive attitude toward self and others; and development of desirable social and leadership skills.

Students identified as Mentally Gifted based on the results and recommendations of the Multi- Disciplinary Gifted Evaluation (MDGE) will be provided an array of academically challenging courses as outlined in the Gifted Individualized Education Program (GIEP). Further provisions for individual enrichment and/or acceleration will be provided based on the student's individual strengths and needs, such as college level courses and/or independent study.

## SPECIAL EDUCATION STATEMENT OF LEAST RESTRICTIVE ENVIRONMENT

The Pocono Mountain School District is committed to delivering curriculum for students with special needs in the Least Restrictive Environment (LRE) with specially designed instruction based upon the results and recommendations of a Multi-Disciplinary Evaluation (MDE) and as outlined in the Individualized Education Program (IEP). Least Restrictive Environment means that a student identified as having a disability will be educated with non-disabled peers to the maximum extent appropriate with supplementary aids and services necessary to achieve individual educational goals and objectives.

## CAREER PATHWAYS

## Connecting Careers and Curriculum for Future Success

The knowledge and skills required to enter college or the workforce are constantly changing. As a result, readying today's students to take the next step in the world can become very demanding. Five Career Pathways were designed to help students focus on an area of interest and a possible career path. The career clusters were developed to relate occupations to broad industries. Within each cluster are several pathways, which provide a more focused category within that cluster. A career path is a broad spectrum of careers that share similar characteristics and for which employment requirements call for common interests, strengths and competencies. The Pocono Mountain School District is committed to preparing and assisting students to make good decisions about life after graduation from high school. The district has made recommendations for the $9^{\text {th }}$ through $12^{\text {th }}$ grade courses that lead to each pathway, while still providing a rigorous and relevant curriculum. Each building contains a team of dedicated guidance counselors prepared to assist students in developing their career pathway as a guide to reaching one's goals. As your student progresses through the Pocono Mountain School District, we encourage you to assist in developing their career plans by seeking input and advisement through the building's guidance department.
Questions . . . Questions . . . Questions . . .

## What are the important questions that I need to ask myself before I begin?

1. How can I create my future?
2. Where can I find help?
3. How does work fit in my life?

## What are Career Pathways?

Each Pathway is a broad grouping of careers that shares similar characteristics with employment requirements that call for many common interests, strengths and competencies. A chosen Pathway can help focus a student's elective courses toward preparing for a specific goal area.

## Why should I choose a career pathway?

- To help focus on a career area that matches interests
- To help set goals and discover classes necessary to achieve those goals
- To create career awareness and encourage planning for post-secondary education and opportunities


## How do I choose a career pathway?

- You will research various career fields and participate in designated career development activities in middle school,such as building a career portfolio in grade 8
- Your counselors, parents and teachers will assist you with this choice.
- You will complete the self-assessment as well as other activities.


## PATHWAYS TO EXCELLENCE

Why should I have an Academic Plan?
As students, parents and educators, we want all graduates to be able to enter college or the workforce with the knowledge and skills needed to be successful. Preparing students to take their place in the world has become very challenging. The knowledge and skills needed to enter college or find a well-paying job have changed from ten or twenty years ago. Today, high school students need similar skills whether they want to enter college or the workplace. Being unprepared can result in additional college cost for you and your child, and may discourage your child from getting the education and career she or he needs and wants.

The Pocono Mountain School District is committed to preparing students for success in the post- secondary endeavor of their choice. For some, this will be a 4 -year college. For others, it may be a community college, apprenticeship, certification, military training or entry into the workforce. Our district offers a rigorous and relevant curriculum designed to develop students' strengths and to provide a broad base of knowledge and skills that will enable students to be successful in tomorrow's global society. The Career Pathways Planner contains information about our career Pathways model in addition to the Course Selection Guide for the upcoming school year. All of this information is designed to help students and their families make good decisions about life after graduation from high school. To parents, we encourage you to take an active role in developing your student's career plans as we strive to create opportunities for each student to experience meaningful career related opportunities during their high school years.

The following has been developed to guide career planning and course selections. Choosing your future is one of the most exciting and challenging decisions you will make. Your selected courses, experiences and accomplishments in high school can lead you to your chosen career path. You have the opportunity to choose your future, not leave it to chance or luck. Planning is critical!

## YOUR FUTURE IS YOUR CHOICE!

For a better future, a student should begin to:

- Explore different possibilities
- Determine your pathway
- Choose courses which follow your pathway
- Learn what the workforce needs and expects of its employees

To help with this planning, talk to your parents, your teachers, and contact your guidance counselor.

## This Career Planning Guide:

- Helps you to focus interests and abilities
- Identifies occupations which are part of your pathway
- Recommends foundation and elective courses which lead to specific career pathways


## Pocono Mountain Career Pathways

## Arts and Communication (AC)

## What is Arts and Communication Pathway?

The Arts and Communication Pathway refers to career fields and programs of study that are related to humanities, media arts, literary arts, technical arts, performing arts, and visual arts.

## Areas of Focus

$>$ AV Technology and Film (AVF)
$>$ Performing Arts (PA)
$>$ Visual Arts (VA)
$>$ Journalism and Broadcasting (JB)
Some career areas in the Arts and Communication (AC) Pathway are:

| Advertising | Acting |
| :--- | :--- |
| Artist | Graphic Designer |
| Illustrator | Interior Designer |
| Journalist | Musician |
| Public Relations | Architecture |

Some courses that apply to the Arts and Communication Pathway are: Drama, Art, Introduction to STEM, Yearbook, Music, Graphic Design, Video Production, Speech Communications, Writer's Workshop, Art, Exploration through STEAM, Video and Music Production, Portfolio Seminar in Fine Arts, Digital Journalism, Intro to Theater Arts, and Advanced Theater Arts.

## Business Finance \& Information Technology (BIT)

## What is the Business Finance and Information Technology Pathway?

The Business Finance and Information Technology Pathway refers to career areas in business management, finance and information services covering aspects of managing and processing digital information.

Areas of Focus
$>$ Business Management and Administration (BA)
$>$ Finance (F)
$>$ Information Technology (IT)
> Marketing (M)
Some career areas in the Business Finance \& Information Technology (BIT) Pathway are:

Accounting
Advertising
Marketing
Hospitality/Tourism
Sales

Computer Systems
Office Administration
Entrepreneurship
Management
Finance

Some courses that apply to the Business Finance \& Information Technology (BIT) Pathway are: Accounting, International Business, Computer Science Courses, Office Technology Courses, Introduction to STEM, Introduction to Engineering Design I and II, Statistics, AP Statistics, Calculus, Yearbook, and Digital Journalism.

## Engineering \& Industrial Technology (EIT)

## What is the Engineering and Industrial Technology Pathway?

The Engineering and Industrial Technology Pathway refers to career fields and programs of study that are related to the technologies necessary to design, develop, install or maintain physical systems.

Areas of Focus
$>$ Engineering and Engineering Technology (ET)
$>$ Architecture and Construction (AC)
$>$ Manufacturing (M)
> Transportation, Distribution and Logistics (TDL)
Some career areas in the Engineering \& Industrial Technology (EIT) Pathway are:

Architect
Engineer (mechanical, electrical, chemical, nuclear, automotive, etc.)
Automotive Technician Network Administrator
CNC Machinist

Electrician
Carpenter/Woodworker
CAD Designer
Computer Engineer/Programmer
Welder
Service Technician

Some courses that apply to the Engineering \& Industrial Technology (EIT) Pathway are: Introduction to Engineering Design I and II, Principles of Engineering Design I and II, Aviation, STEM, Statistics, AP Statistics, Calculus, Chemistry, Biology, Physics, CADD, and Art Exploration through STEAM.

## Human Services (HS)

## What is the Human Services Pathway?

The Human Services Pathway is designed to cultivate students' interests, skills and experiences for employment in careers related to family and human needs.

Areas of Focus
$>$ Education (E)
$>$ Government \& Public Administration (GPA)
$>$ Hospitality and Tourism (HT)
$>$ Counseling, Personal Care (CPC)
$>$ Law, Public Safety, Government (LPG)
Some career areas in the Human Services (HS) Pathway are:
Social worker
Law enforcement
Government Positions
Child Care Provider
Education

Lawyer
Military Careers

Some courses that apply to the Human Services (HS) Pathway are: Child Development, World of Foods, Legal Education, Military History, Civil Rights, World Languages, Psychology, Sociology, Human Development, Speech Communications, Statistics, Introduction to STEM, and Forensics I and II.

## $\square$

Science and Health (SH)

## What is the Science and Health Pathway?

The Science and Health Pathway is designed to promote students' interest in life, physical and behavioral sciences. In addition, it involves the planning, managing and providing of therapeutic and diagnostic services, health information, biochemistry and research and development.

Areas of Focus
$>$ Agriculture, Food and Natural Resources (AFN)
$>$ Health Sciences (HS)
$>$ Science, Tech, Engineering and Mathematics (STEM)
Some career areas in Science and Health (SH) Pathway are:
Physical/Occupational Therapist Nurse
Radiologist
Physician
Dentist
Pharmacist
Pharmacy Technician
Forestry
Conservation Officer
Food Scientist/Researcher

Nutritionist

Emergency Medical Technician
Psychologist
Landscape Design/Landscaper
Wildlife or Zoo Technician
Any aspect of Agriculture
Some courses that apply to the Science and Health (SH) Pathway are: Studio Art, Drawing, World of Foods, Psychology/Sociology, Math, Health, Science, Health Emergencies, Fitness/Sport Nutrition, Strength and Conditioning, Human Anatomy, Introduction to Engineering Design I and II, Principles of Engineering Design I and II, Aviation STEM, Statistics, Calculus, Chemistry, Biology, Physics, and CADD.

## ARTS AND COMMUNICATION COURSE OF STUDY

This four-year plan of study should serve as a guide as you develop your academic core requirements and electives. All plans should meet graduation requirements.

| $9^{\text {th }}$ |  | $10^{\text {th }}$ |  | $11^{\text {th }}$ |  | $12^{\text {th }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * English <br> Language Arts | Academic or Honors 9 | * English <br> Language Arts | Academic or Honors 10 | * English <br> Language Arts | Academic, Honors 11 or **AP Language \& Comp | * English <br> Language Arts | Academic, <br> Honors 12 or <br> AP Lit \& Comp <br> **AP Lang. \& Comp |
| *Math | Algebra I A <br> Algebra I (Ac) <br> Geometry <br> ( $\mathrm{AC} / \mathrm{H}$ ) | *Math | Algebra I B/Algebra IB <br> Enhancement <br> Geometry (Ac) <br> Algebra II (Ac/H) | *Math | Algebra II <br> Algebra II (Ac) <br> Algebra III/ Trig <br> Statistics <br> PreCalculus (Ac/H) | *Math | Geometry <br> Statistics <br> PreCalculusAc/H) <br> Honors Calculus (H) <br> **AP Calculus AB, BC <br> **AP Statistics |
| *Science | Contemporary <br> Integrated <br> Science <br> Biology <br> Intro to STEM | *Science | **AP Biology <br> Biology <br> Chemistry Science <br> Intro to STEM | *Science | **AP Chemistry <br> Physics <br> Earth Science or <br> General Physical <br> Science <br> Human Anatomy Intro to STEM | *Science | **AP Physics Intro to STEM |
| *Social Studies | **AP Human Geography | *Social Studies | Civics | *Social Studies | Modern US History or **AP US History | *Social Studies | World History or **AP European History or AP World History |
| *Health | PE/PE/Computer |  |  |  |  | *Health | PE/PE/Finance |
| World Language | Spanish I, II French I, II German I, II | World Language | Spanish I, II, III French I, II, III German I, II, III | World Language | Spanish III, IV/AP French III, IV/AP German III, IV/AP | World Language | Honors Spanish IV/AP <br> Honors French IV/AP <br> Honors German IV/AP |
|  |  | AP Seminar Grade 10, 11 | Prerequisite:Successful completion of AP Human Geography in Grade 9 or successful completion of an AP course in Grade 10 |  |  |  |  |
|  |  |  |  | AP Research Grade 11,12 | Prerequisite: AP Seminar |  |  |

Courses above are graduation requirements $\left(^{*}\right.$ ) and/or recommended (R) for this Pathway **Elective course for this pathway

## BUSINESS FINANCE AND INFORMATION TECHNOLOGY (BIT) PATHWAY

Designed to prepare students for careers in the areas of business management, finance and information services covering aspects of managing and processing digital information.

| Are you interested in... | Can you... | Do you enjoy... |
| :--- | :--- | :--- |
|  |  |  |
| A Business Environment | Work easily with others | Meeting with groups |
| Management | Organize your time efficiently | Making budgets |
| Advertising | Work with statistics | Organizing a project |
| Marketing and Sales | Use computers \& other technology | Planning an event |
| Computers \& Technology | Pay attention to details | Working with technology |
| Web Development | Solve problems | Selling products and services |
| Presentations to Groups | Work independently | Processing numbers and figures |
| Legal issues | Show initiative | Preparing financial reports |
| Accounting | Work on a team | Following directions |
| Different work sites |  |  |
|  |  |  |

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below which are categorized by level of post-secondary training.

## PATHWAY FOCUS AREAS

Business Management and Administration (BMA)
Information Technology (IT)
Marketing (M)
Finance (F)

## SAMPLE CAREERS

| Entry | Technical/Skilled (1-3 yrs.) | Professional (4 or + years) |
| :--- | :--- | :--- |
| Customer Service Representative(M) | Computer Salesperson (M) | Marketing Manager (M) |
| Reservation/Travel Agent (M) | Retail Buyer (M) | Certified Public Accountant (F) |
| Telemarketer (M) | Bank Collection Officer (F) | Economist (F) |
| Bookkeeper (F) | Tax Preparer (F) | Financial Manager (F) |
| Cashier (F) | Claims Adjuster (F) | Securities Sales Rep. (F) |
| Payroll Clerk (F) | Software Engineer (IT) | E-Commerce Analyst (IT) |
| Title Searcher (F) (IT) |  |  |
| Computer Operator (IT) | Computer Programmer (IT) | Systems Software Engineer (IT) |
| Accounts Payable Office Mgr. (BMA) | Production Support Analyst (IT) | Systems Analyst (IT) |
| Administrative Assistant (BMA) | Desktop Publisher (IT \& M) | Hospital Administrator (BMA) |
| Bank Teller (F) | Medical Secretary (BMA) | Human Resources Manager (BMA) |
| File Clerk (BMA) | Real Estate Agent (BMA \& M) | Chief Executive Officer (BMA) |
| Retail Sales Clerk (BMA) | Restaurant Manager (BMA \& M) | Manufacturing Sales Rep (BMA \& M) |
| School Secretary (BMA) | Sales Representative (BMA \& M) | Management Analyst (BMA) |
| Advertising Sales Agent (M) | Computer Support Specialist (IT) |  |
|  |  |  |

## BUSINESS FINANCE AND INFORMATION TECHNOLOGY COURSE OF STUDY

This four-year plan of study should serve as a guide as you develop your academic core requirements and electives. All plans should meet graduation requirements.

| $9^{\text {th }}$ |  | $10^{\text {th }}$ |  | $11^{\text {th }}$ |  | $12^{\text {th }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * English <br> Language Arts | Academic or Honors 9 | * English <br> Language Arts | Academic or Honors 10 | * English <br> Language Arts | Academic or <br> Honors 11 <br>  <br> Comp | * English <br> Language Arts | Academic or <br> Honors 12 <br> AP Lit \& Comp <br> **AP Lang. \& Comp |
| *Math | Algebra I A <br> Algebra I (Ac) <br> Geometry (AC/H) | *Math | Algebra I B/Algebra <br> IB Enhancement <br> Geometry (Ac) <br> Algebra II (Ac/H) | *Math | Algebra II <br> Algebra II (Ac) <br> Algebra III/ Trig <br> Statistics <br> PreCalculus(Ac/H) | *Math | Geometry <br> Statistics <br> PreCalculus(Ac/H) <br> Honors Calculus (H) <br> **AP Calculus AB, BC <br> **AP Statistics |
| *Science | Contemporary Integrated Science Biology Intro to STEM | *Science | **AP Biology <br> Biology <br> Chemistry Zoology <br> Intro to STEM | *Science | **AP Chemistry <br> Physics <br> Earth Science or <br> General Physical <br> Science <br> Human Anatomy <br> Intro to STEM | *Science | **AP Physics <br> Intro to STEM |
| *Social Studies | **AP Human Geography | *Social Studies | Civics | *Social <br> Studies | Modern US <br> History or <br> **AP US History | *Social Studies | World History or **AP European History or AP World History |
| *Health | PE/PE/Computer |  |  |  |  | *Health | PE/PE/Finance |
| (R) World Language | Spanish I, II French I, II German I, II | (R) World Language | Spanish I, II, III French I, II, III German I, II, III | (R) World Language | Spanish III, IV/AP <br> French III, IV/AP <br> German III, IV/AP | (R) World Language | Honors Spanish IV/AP Honors French IV/AP Honors German IV/AP |
|  |  | AP Seminar Grade 10, 11 | Prerequisite:Successful completion of AP Human Geography in Grade 9 or successful completion of an AP course in Grade 10 |  |  |  |  |
|  |  |  |  | AP Research Grade 11,12 | Prerequisite: AP Seminar |  |  |
| Courses above are graduation requirements (*) and/or recommended (R) for this Pathway **Elective course for this pathway |  |  |  |  |  |  |  |

## ENGINEERING AND INDUSTRIAL TECHNOLOGY (EIT) PATHWAY

This Pathway is designed to cultivate students' interests, awareness and application to careers related to technologies necessary to design, develop, install and maintain physical systems.

| Are you interested in... | Can you... | Do you enjoy... |
| :--- | :--- | :--- |
| Building and Construction | Apply science and math to the real world | Travel |
| Tools, Equipment \& Materials | Read and understand directions | Working with your hands |
| Woodworking | Solve problems of a complex nature | Designing/working with projects, models and |
| Math and Science Classes | Understand directives and read maps | prototypes |
| Fitness \& Sports Precision Work | Organize reports and people | Working in a lab setting |
| Design and Architecture | See a task through to completion | Working on a team |
| Engineering Computer | Use a computer | Building with your hands |
| Technology Production |  | Operating tools and equipment |
| Management | Pay close attention to detail |  |
| Curious how things work |  |  |

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below which are categorized by level of post-secondary training.

PATHWAY FOCUS AREAS Architecture and Construction (AC) Manufacturing (M) Engineering and Engineering Technology (ET) Transportation, Distribution and Logistics (TDL)

## SAMPLE CAREERS

| Entry (OJT) | Technical/Skilled (1-3 yrs.) | Professional (4 or + years) |
| :---: | :---: | :---: |
| Carpet Installer (AC) | Grader \& Dozer Operator (AC) | Navigator (TDL) |
| Drywall Worker (AC) | Electric Technician (M) | Aeronautical Engineer (ET \& TDL) |
| Roofer (AC) | Metal Engineering Technician (M) | Aerospace Engineer (ET \& TDL) |
| Machine Operator (M) | Auto Mechanic (TDL) | Airline Pilot (ET \& TDL) |
| Baggage Handler (TDL) | Air Traffic Controller (TDL) | Architect (ET \& AC) |
| Dockworker (TDL) | Auto Body Repair (TDL) | Civil Engineer (ET \& AC) |
| Freight Handler (TDL) | Bus Driver (TDL) | Chemical Engineer (ET) |
| Laborer (AC, M, TDL) | Diesel Mechanic (TDL) | Computer Network Engineering (ET) |
| Warehouse Worker (AC, M, TDL) | Dispatch (TDL) | Industrial Engineer (ET \& M) |
| Industrial Machine Mechanic (M) | Motorcycle Mechanic (TDL) | Mechanical Engineer (ET \& M) |
|  | Taxi Driver (TDL) | Astronaut (ET) |
| Apprenticeships | Truck Driver (TDL) | Nuclear Engineer (ET) |
|  | Truck Terminal Manager (TDL) | Petroleum Engineer (ET) |
| Brick Mason (AC) | Civil Engineering Technician (ET) | NASA Scientist (ET) |
| Carpenter (AC) | Robotics Technician (ET) | Transportation Engineer (ET \& TDL) |
| Electrician (AC) | CAD/CAM Technician (M \& ET) | Industrial Production Manager (M) |
| HVAC (AC) | Laser Technician (M \& ET) | Purchasing Agent (M) |
| Plumber (AC) | Production \& Operating Workers | Technical Writer (E) |
| Machinist (M) | Supervisor (M) | Construction Manager (AC) |
| Diesel Mechanic (TDL) <br> Surveyor (TDL \&ET) | Welder (M) | Cost Estimator (AC) |

ENGINEERING AND INDUSTRIAL TECHNOLOGY COURSE OF STUDY
This four-year plan of study should serve as a guide as you develop your academic core requirements and electives. All plans should meet graduation requirements.

| $9^{\text {th }}$ |  | $10^{\text {th }}$ |  | $11^{\text {th }}$ |  | $12^{\text {th }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * English <br> Language Arts | Academic or Honors 9 | * English <br> Language Arts | Academic or Honors 10 | * English <br> Language Arts | Academic or <br> Honors 11 **AP Language \& Comp | * English <br> Language Arts | Academic or Honors 12 <br> AP Lit \& Comp <br> ${ }^{* *}$ AP Lang. \& Comp |
| *Math | Algebra I A <br> Algebra I (Ac) <br> Geometry ( $\mathrm{AC} / \mathrm{H}$ ) | *Math | Algebra I B/Algebra <br> IB Enhancement <br> Geometry (Ac) <br> Algebra II (Ac/H) | *Math | Algebra II <br> Algebra II (Ac) <br> Algebra III/ Trig <br> Statistics <br> PreCalculus (Ac/H) | *Math | Geometry <br> Statistics <br> PreCalculus ( $\mathrm{Ac} / \mathrm{H}$ ) <br> Honors Calculus (H) <br> **AP Calculus AB, BC <br> **AP Statistics |
| *Science | Contemporary <br> Integrated Science <br> Biology <br> Intro to STEM <br> Intro to Engineering <br> Design I <br> Intro to Engineering <br> Design II <br> Aviation STEM <br> Principles of <br> Engineering I/II | *Science | **AP Biology <br> Biology <br> Chemistry Zoology <br> Intro to STEM <br> Intro to Engineering <br> Design I <br> Intro to Engineering <br> Design II <br> Aviation STEM <br> Principles of <br> Engineering I/II | *Science | **AP Chemistry <br> Physics <br> Earth Science or <br> General Physical <br> Science <br> Human Anatomy <br> Intro to STEM <br> Intro to Engineering <br> Design I <br> Intro to Engineering <br> Design II <br> Aviation STEM <br> Principles of <br> Engineering I/II | *Science | **AP Physics <br> Intro to STEM <br> Intro to Engineering Design I <br> Intro to Engineering Design II <br> Aviation STEM <br> Principles of Engineering I/II |
| *Social Studies | **AP Human Geography | *Social Studies | Civics | *Social Studies | Modern US History or **AP US History | *Social Studies | World History or **AP European History or AP world History |
| *Health | PE/PE/Computer | **Introduction to CAD <br> **Design and Problem Solving |  | **Introduction to CAD <br> **Manufacturing Technology |  | *Health | PE/PE/Finance |
| (R) World Language | Spanish I, II French I, II German I, II | (R) World Language | Spanish I, II, III French I, II, III German I, II, III | (R) World Language | Spanish III, IV/AP French III, IV/AP German III, IV/AP | (R) World Language | Honors Spanish IV/AP <br> Honors French IV/AP <br> Honors German IV/AP |
|  |  |  Prerequisite:Successf <br> ul completion of AP <br> AP Seminar Human Geography in <br> Grade 10,11 <br> Grade 9 or successful <br> completion of an AP <br> course in Grade 10  |  |  |  |  |  |
|  |  |  |  | AP Research Grade 11,12 | Prerequisite: AP Seminar |  |  |

Courses above are graduation requirements (*) and/or recommended (R) for this Pathway
**Elective course for this pathway

## HUMAN SERVICES PATHWAY

This Pathway is designed to cultivate students' interests, skills and experiences for employment in careers related to family and human needs.

| Are you interested in... | Can you... | Do you enjoy... |
| :--- | :--- | :--- |
| Working with People | Organize Well | Communication Services |
| Owning Your Own Business | Plan and Direct Programs | Helping and Protecting Others |
| Aging Adults | Be Creative | Working with People |
| Child Development | Communicate Well | Counseling and Advising People |
| Family \& Social Services | Assume Leadership Work with a Team | Serving Others' Needs |
| Food Preparation Teaching | Use Inter-personal Skills | Interviewing People |
| Counseling | Be Conscientious and Dependable | Selling Products and Services |
|  | Plan Budgets | Handling Customer Complaints |
|  |  | Searching for Answers to Human |
|  |  | Problems |

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below which are categorized by level of post-secondary training.

## PATHWAY FOCUS AREAS

Counseling, Personal Care (CPC)
Education (E)
Law, Public Safety and Government (LPG)
Hospitality and Tourism (HT)
SAMPLE CAREERS

| Entry (OJT) | Technical/Skilled (1-3 years) | Professional (4 or + years) |
| :--- | :--- | :--- |
| Child Care Worker (CPC) | Barber (CPC) | Funeral Director (CPC) |
| Cosmetics Representative (CPC) | Cosmetologist (CPC) | Marriage \& Family Therapist (CPC) |
| Dry Cleaning Operator (CPC) | Fashion Designer (CPC) | College Professor (E) |
| Home Health Aide (CPC) | Manicurist (CPC) | Principal (E) |
| Library Assistant (E) | Massage Therapist (CPC) | Teacher (E) |
| Armed Services Career (LPG) | Mortician (CPC) | City Manager (LPG) |
| Bailiff (LPG) | Truck Driver (CPC) | Criminologist (LPG) |
| Postal Services Worker (LPG) | Teacher's Aide (E) | FBI Agent (LPG) |
| Security Guard (LPG) | Armed Services Career (LPG) | Lawyer (LPG) |
| Utility Worker (LPG) | Crime Lab Technician (LPG) | Parole Officer (LPG) |
| Aerobics Instructor (HT) | Fire Fighter (LPG) | Mental Health Counselor (CPC) |
| Travel Agent (HT) | Bartender (HT) | Park Ranger (LPG) |
| Waitress (HT) | Chauffer (HT) | Workforce Director (LPG) |
| Teacher's Assistant (C) | Flight Attendant (HT) | Athletic Agent (HT) |
| Home Care Aide (CPC) | Meat Cutter (HT) | Executive Chef (HT) |
|  | Personal Trainer (CPC) | Family Planner (HT) |
|  | Postmaster (LPG) | Food Services Manager (HT) |
|  | Chef (HT) Baker (HT) | Hotel/Motel Management (HT) |
|  |  | Historical Sites or Museum Guide (E) |
|  |  | Historical Journalist (E) |
|  | Librarian or Archivist (E) |  |
|  |  | Information Manager (E) |

## HUMAN SERVICES COURSE OF STUDY

This four-year plan of study should serve as a guide as you develop your academic core requirements and electives. All plans should meet graduation requirements.

| $9^{\text {th }}$ |  | $10^{\text {th }}$ |  | $11^{\text {th }}$ |  | $12^{\text {th }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * English <br> Language Arts | Academic or Honors 9 | * English <br> Language Arts | Academic or Honors 10 | * English <br> Language Arts | Academic or Honors 11 <br> **AP Language \& Comp | * English <br> Language Arts | Academic or Honors <br> 12 <br> AP Lit \& Comp <br> **AP Lang. \& Comp |
| *Math | Algebra I A <br> Algebra I (Ac) <br> Geometry ( $\mathrm{AC} / \mathrm{H}$ ) | *Math | Algebra I B <br> Geometry (Ac) <br> Algebra II (Ac/H) | *Math | Algebra II <br> Algebra II (Ac) <br> Algebra III/ Trig <br> Statistics <br> PreCalculus(Ac/H) | *Math | Geometry <br> Statistics <br> PreCalculus(Ac/H) <br> Honors Calculus (H) <br> **AP Calculus AB, <br> BC <br> **AP Statistics |
| *Science | Contemporary <br> Integrated Science <br> Biology <br> Intro to STEM | *Science | AP Biology Chemistry Zoology Intro to STEM | *Science | AP Chemistry <br> Physics <br> Earth Science or <br> General Physical <br> Science <br> Human Anatomy <br> Intro to STEM | *Science | AP Physics AP Biology AP Chemistry Intro to STEM |
| *Social Studies | **AP Human Geography | *Social Studies | Civics | *Social Studies | Modern US History or **AP US History | *Social Studies | World History or AP European History AP World History AP Human Geography AP US History |
| *Health | PE/PE | **Introduction <br> **Design and P | CAD <br> lem Solving | **Introduction <br> **Manufacturin | CAD <br> Technology | *Health | PE/PE |
| (R) World Language | Spanish I, II <br> French I, II <br> German I, II | (R) World Language | Spanish I, II, III French I, II, III German I, II, III | (R) World Language | Spanish III, IV/AP French III, IV/AP German III, IV/AP | (R) World Language | Honors Spanish IV/AP <br> Honors French IV/AP <br> Honors German IV/AP |
|  |  | AP Seminar Grade 10, 11 | Prerequisite:Successful completion of AP Human Geography in Grade 9 or successful completion of an AP course in Grade 10 |  |  |  |  |
|  |  |  |  | AP Research Grade 11,12 | Prerequisite: AP Seminar |  |  |
| Courses above are graduation requirements $\left(^{*}\right.$ ) and/or recommended ( R ) for this Pathway **Elective course for this pathway |  |  |  |  |  |  |  |

## SCIENCE AND HEALTH (SH) PATHWAY

This Pathway is designed to cultivate students' interests in life, physical and behavioral sciences. In addition, it involves the planning, managing and providing of therapeutic services, diagnostic services, health information, biochemistry and research and development.

| Are you interested in... | Can you... | Do you enjoy... |
| :--- | :--- | :--- |
| Health Care Environment | Pay attention to detail | Diagnosing and caring for sick |
| Science and Medicine Medical | USe a computer and technology | animals |
| Research Food Production | Work in a lab setting or medical | Working outdoors with wildlife |
| Environment \& Conservation | facility | Solving problems |
| Pharmacy Physical Therapy | Apply a scientific theory to real-life | Working on cutting-edge scientific |
| Sports/Fitness Information | problems | research |
| Systems Conservation Radiology | Work outdoors around animals and | Working with a team |
|  | plants | Medical lab research |
|  | Collect and analyze data from | Making a contribution to society |
|  | experiments | Working with numbers |
|  | Work with people in need | Developing conclusions from a |
|  | Work with science and math theories | database |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below which are categorized by level of post-secondary training.

PATHWAY FOCUS AREAS<br>Health Science (HS)<br>Agriculture, Food \& Natural Resources (AFN)<br>Science, Technology and Engineering Math (STEM)

## SAMPLE CAREERS

| Entry (OJT) | Technical/Skilled (1-3 years) | Professional (4 or + years) |
| :--- | :--- | :--- |
| Hospital Worker (HS) | Certified Nursing Assistant (HS) | Athletic Trainer (HS) |
| Patient Care Technician (HS) | Dental Hygienist (HS) Licensed | Speech/Language Pathologist (HS) |
| Dialysis Technician (HS) | Practical Nurse (HS) | Dietician (HS) |
| EEG Technician (HS) | Medical Lab Technician (HS) | Physician Assistant (HS) |
| Home Health Aide (HS) | Radiological Technician (HS) | Medical Examiner (HS) |
| Physical Therapy Aide (HS) | Respiratory Therapist (HS) | *Pharmacist (HS) Physician (HS) |
| Animal Caretaker (AFN) | Dental Lab Technician (HS \& STEM) | Physical Therapist (HS) |
| Breeder (AFN) | Fish \& Game Worker (AFN) | Registered Nurse (HS) |
| Extension Service Worker (AFN) | Forest Conversationalist (AFN) | Agronomist (AFN) |
| Food Conservation Worker (AFN) | GPS Technician (AFN) | Environmental Scientist (STEM) |
| Wildlife Reserve Worker (AFN) | Surveyor (AFN) | Geologist (AFN) |
| Hazardous Waste Technician (STEM) | Veterinary Technician (AFN) | Marine Biologist (AFN) Soil |
| Optician (STEM) | Nano technician (STEM) | Conservationists (AFN) |
| Data Entry (STEM) | Sound Engineer (STEM) | Veterinarian (AFN) |
| Surgical \& Mapping Technicians (STEM) | Personal Trainer (HS) | Chemist (STEM) |
| Nurse's Aide, Orderlies (HS) | Emergency Medical Technician (HS) | Geneticist (STEM) |
| Pharmacy Technicians (HS) | Biological Technician (STEM) | Statistician (STEM) |
|  | Chemical Technician | Zoologist (STEM) |
|  |  | Nuclear Engineer (STEM) |
|  |  |  |

SCIENCE AND HEALTH COURSE OF STUDY
This four-year plan of study should serve as a guide as you develop your academic core requirements and electives. All plans should meet graduation requirements.


Courses above are graduation requirements $(*)$ and/or recommended (R) for this Pathway **Elective course for this pathway

## ADVANCED PLACEMENT CAPSTONE COURSES

AP Capstone ${ }^{\text {TM }}$ is a diploma program based on two yearlong AP courses: AP Seminar and AP Research. These courses are designed to complement other AP courses that the AP Capstone student may take.
Instead of teaching specific subject knowledge, AP Seminar and AP Research use an interdisciplinary approach to develop the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work.

## Students can earn the AP Capstone Diploma ${ }^{\text {TM }}$ or the AP Seminar and Research Certificate ${ }^{\text {TM }}$

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma ${ }^{\mathrm{TM}}$.

Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate ${ }^{\mathrm{TM}}$.

The College Board developed the AP Capstone Diploma ${ }^{\mathrm{TM}}$ program at the request of higher education professionals, who saw a need for a systematic way for high school students to begin mastering these skills before college.

## AP Seminar

Grade 10, 11
Prerequisite: Students who successfully complete AP Human Geography in the $9^{\text {th }}$ grade may take AP Seminar in grade 10. Students who successfully complete an AP course in Grade 10 may take AP Seminar in Grade 11.

Develop and practice the skills in research, collaboration, and communication that students need in any academic discipline. Students investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team. Skills learned are reading and analyzing articles, studies, and other texts, gathering and combining information from sources, viewing an issue from multiple perspectives and crafting arguments based on evidence.

## College Course Equivalent

AP Seminar is an interdisciplinary course that encourages students to demonstrate critical thinking, collaboration, and academic research skills on topics of the student's choosing. To accommodate the wide range of student topics, typical college course equivalents include interdisciplinary or general elective courses.

Grade 11, 12
Prerequisite: AP Seminar
Students build on what they learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students will design, plan, and conduct a year-long research-based investigation to address a research question. Skills learned in AP Seminar include conducting independent research, analyzing sources and evidence, applying context and perspective, writing a college level academic paper and presenting research findings to an audience.

## College Course Equivalent

AP Research is an interdisciplinary course that encourages students to demonstrate critical thinking and academic research skills on a topic of the student's choosing. To accommodate the wide range of student topics, typical college course equivalents include introductory research or general elective courses.


## PMSD PA Seal of Biliteracy

The Pennsylvania Seal of Biliteracy (PASB) is an award presented by a school or school entity in recognition of students who have attained intermediate-high proficiency in English and one or more additional world languages upon high school graduation.


By establishing the PASB, the Commonwealth encourages college and career readiness and engagement as a global citizen through the academic rigor of attaining proficiency in English and one or more world languages by high school graduation.

It is not a requirement for any PMSD student. It is optional. This is not an award to earn credit towards graduation. It is an award to add to your high school transcripts that colleges may or may not recognize.

The Purpose of the Seal of Biliteracy:

- Recognize the value of world language and dual language programs in Pennsylvania schools;
- Affirm the value of cultural and linguistic diversity in our schools and communities;
- Encourage family and community support development of home languages other than English, as well as the study of additional world languages and cultures;
- Encourage all students to acquire proficiency in English and another world language;
- Certify intermediate-high proficiency in English and another world language;
- Provide employers with a method of identifying candidates with biliteracy skills;
- Provide universities with a method to recognize biliterate students; and
- Promote civic and global engagement.

All students who have met proficiency criteria in both English and another world language through schoolbased programs, community-based language programs, or life experiences can earn the Pennsylvania Seal of Biliteracy.

To earn the Pennsylvania Seal of Biliteracy, a student must:

1. Complete all requirements to earn a high school diploma;
2. Meet any one of the English Proficiency Criteria Options found on the charts; and
3. Meet any one of the World Language Proficiency Criteria Options found on the charts.

## English Proficiency Criteria Options:

Option 1: Score Proficient or Advanced on one of the ELA state assessments by 11th grade:

- Keystone Literature
- PASA (Pennsylvania Alternate State Assessment)

Option 2: English learners have met all criteria for reclassification by October 1st of their graduating year.

Option 3: Achieve the following scores on one of these English assessments:

- 3 or higher on an Advanced (AP) American Literature Examination
- 4 or higher on International Baccalaureate (IB) English A: Literature and Language HL
- Proficient on the ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL) or ESL

Option 4: Present a portfolio that meets the criteria for listening, speaking, reading, and writing at the intermediate-high English proficiency level established by the school's Seal of Biliteracy Committee.
*Portfolio rubrics furnished upon request

## World Language Proficiency Criteria Options:

Option 1: Provide transcripts from a school in a country outside the U.S. or Puerto Rico showing at least three years of instruction in the student's home language in grades 8 or beyond indicating an average of final grades equaling " B ", $80 \%$, or higher.

Option 2: Score equivalency of intermediate-high or higher on one of the modern world language assessments on the list of approved world language assessments.

Option 3: Score the equivalency of intermediate-high or higher on a community-based world language assessment normed to the ACTFL proficiency levels as approved by the school's PASB committee.

Option 4: Present a portfolio that meets the criteria for listening, speaking, reading, and writing at the intermediate-high world language proficiency levels established by the school's Seal of Biliteracy committee to at least one reviewer with high proficiency in the target language.
*Portfolio rubrics furnished upon request

The PMSD Seal of Biliteracy Team members evaluate all student applications according to the mentioned established criteria to determine whether or not you qualify for this recognition. Contact your school counselor, if you are interested in this program at the beginning of the school year.

## ART

## INTRODUCTION

Art Education is a curriculum structured to enable all students to develop problem solving skills, artistic technical skills, and individual abilities and ambitions through creative experiences. Students critique their work and the work of other artists. All artistic endeavors are to be of original design and composition. The study of major artistic periods will be incorporated in the course offerings.

## ART SEQUENCE

| Course | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Ceramics I | $9,10,11,12$ | No Prerequisite |
| Ceramics II | $10,11,12$ | Ceramics I |
| Ceramics II | $10,11,12$ | Ceramics I,II |
| Drawing I | $9,10,11,12$ | No Prerequisite |
| Drawing II | $9,10,11,12$ | Drawing I |
| Painting I | $10,11,12,12$ | No Prerequisite |
| Painting II | $9,10,11,12$ | Painting I |
| Studio Art I Prerequisite |  |  |
| Studio Art II | $9,10,11,12$ | Any Level I Course |
| Digital Photography I (STEAM) | $9,10,11,12$ | No Prerequisite |
| Digital Photography II (STEAM) | $10,11,12$ | Digital Photography I |
| Portfolio Seminar in Fine Arts | 11,12 | Completed three or more art courses and <br> teacher recommendation |
| Art Exploration through STEAM | $9,10,11,12$ | No Prerequisites |
| AP Studio Art: 2-D Design <br> (STEAM) | 11,12 | Art teacher recommendation; Drawing I, and <br> one of the following: Digital Photography I, <br> Painting I, Ceramics I, Graphic Design, 2D <br> Animation, 3D Animation, Ceramics I; |
| AP Studio Art: 3-D Design <br> (STEAM) | 11,12 | Art teacher recommendation, Ceramics I, and <br> one of the following: Ceramics II, Ceramics <br> I, Studio Art I, Studio Art II, Creative <br> Fashion I, Creative Fashion II |
| Digital Journalism | 11,12 | Art, Social Studies/ELA teacher <br> recommendation |
| AP Art History | $10,11,12$ | Drawing I, Drawing II, Studio Art I <br> AP Drawing <br> or Art teacher is required |

The Ceramics I course provides the opportunity for students to experience working in the media of clay. Students are introduced to basic hand building techniques including pinch, coil, and slab. Beginning wheel throwing is also presented in Ceramics I. Students will learn about the versatility of clay bodies, surface decoration and glazing techniques. Studio clay production will vary in styles using ancient methods to contemporary and exploring functional pottery.

## CERAMICS II

Grades 10,11, 12
Prerequisite: Ceramics I
Ceramics II students will challenge themselves with hand building and wheel projects that build upon the Ceramics I curriculum. Focus will be on complexity, refinement and glazing. Students will critique their works using aesthetic and technical criteria.

## CERAMICS III (EHS)



Grades 10,11,12
.50 credit
Prerequisite: Ceramics I and II
Ceramics III students will continue to explore hand-building and wheel projects beyond the previously learned skills. Students will develop projects within a given theme, and will focus on creativity, refinement, and glazing techniques. Students will design, create, and glaze projects independently and will participate in the critique process as a group.

## DRAWING I <br> 

Grades 9, 10, 11, 12
The Drawing I course provides students the opportunity for creative experiences in two-dimensional media such as pencil, charcoal, pastel, and pen and ink. Their knowledge of the elements and principles of art provides the foundation for their exploration into composition with an emphasis on technical proficiency.

## DRAWING II

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Drawing I

The Drawing II course provides students the opportunity to concentrate on the refinement of their technical skills in two-dimensional media such as pencil, charcoal, pastel, pen and ink, and mixed media. Students will begin to develop an emotional response in their work and be able to critique their compositions.

The Painting I course offers students the opportunity for creative experiences in two-dimensional media. Their knowledge of the elements of principles of art provides the foundation for their work of art in acrylic paint, watercolor, ink and wash, and mixed media.

## PAINTING II

Grades 10, 11, 12
.50 credit
Prerequisite: Painting I
The Painting II course offers students the opportunity for the continued development of their technical skills in two-dimensional media. The creative use of color, composition, and perspective will effectively utilize their imagination and challenge their artistic abilities.

## STUDIO ART I

Grades 9, 10, 11, 12
The Studio Art I course offers students the opportunity for creative experiences in two-dimensional and threedimensional media. Students will experience various media such as clay, painting, pen and ink, pastel, sculpture, and found objects. Composition and the principles and elements of art will become an important aspect of the students' work.

## STUDIO ART II

Grades 9, 10, 11, 12
.50 credit
Prerequisites: Any level I course
The Studio Art II Course provides students the opportunity to concentrate on the refinement of forms and shapes in both two-dimensional and three-dimensional work. Students will develop an awareness of creative expression through various media and be able to critique their works of art.

## DIGITAL PHOTOGRAPHY I

Grades 9, 10, 11, 12

Requirement: Students should have access to a digital camera with a 24.2 Mega Pixel. The digital Camera should have adjustable aperture and shutter speed capabilities.

This course involves instruction in all aspects of Digital Photography including basic picture taking, career and visual presentation. While using their digital camera, students will understand the proper use of a variety of camera equipment including a digital camera, flashes, lens, studio lights, tripods, and lighting filters. They will learn digital camera functions including: uploading, downloading, photo editing, and digital manipulation using the latest version of Photoshop. Students will develop a better sense of visual organization through the study of compositional elements and visual appeal while creating eye catching images. Students will interact while performing personal photographic assessments, peer assessments, and weekly thematic assignments.

DIGITAL PHOTOGRAPHY II
Grades 10, 11, 12
Prerequisite: Digital Photography I
Requirement: Students should have access to a digital camera with a 24.2 Mega Pixel or higher. The digital camera should have adjustable aperture and shutter speed capabilities so they will gain a better understanding of all camera functions.

This course would be a continuation of the level I Digital Photography course; highlighting and reviewing the basic camera functions as well as exploring more advanced digital photography processes. Students will explore careers in photography while developing their digital portfolio. Studio production with in-house photo shoots and commercial assignments that will give them an advanced look into photographic careers that are essential today such as photojournalism, fashion, advertising/commercial, portrait and fine art photography. Students will interact while performing personal photographic assessments, peer assessments, and weekly thematic assignments.

## PORTFOLIO SEMINAR IN FINE ARTS

Grades 11, 12 (Fall offering only)
.50 credit
Prerequisite: completed three or more art courses and teacher recommendation
Coursework is designed to build mastery in techniques and composition in a variety of artistic mediums. Students will apply their skills creatively to develop and express their own unique artistic visions while building a portfolio of substantial works of art. Students will also serve on a peer review committee within the program to constructively critique peer work and provide objective analysis. Upon completion of the course, students will develop a portfolio of at least 15 works across multiple mediums to present to both the peer review committee and members of the art department for final analysis ahead of showcasing their work for college entry.

## ART EXPLORATION THROUGH STEAM



Grades 9, 10, 11,12
Foundations of Art through STEAM is an entry level course designed to provide a foundation for all art classes at the high school level. Emphasis is placed on understanding the Elements of Art and Principles of Design with an emphasis on STEAM concepts as a basis for composition and expression. Students will explore a variety of artists and art processes such as drawing, painting, printmaking, two \& three-dimensional design, and digital art. Students will be exposed to a vast variety of artistic materials and tools including cutting edge design software and 3D printing. Willingness to get involved in the creative process is a more important requirement than the student's talent or previous experience.

AP STUDIO ART: 2-D DESIGN
Grades 11, 12
Prerequisite: Art teacher recommendation; Drawing I and one of the following: Studio Art I, Digital
Photography I, Painting I, Ceramics, I, Graphic Design, 2D Animation, 3D Animation
AP Studio Art: 2-D Design meets National Standards allowing students to earn college credit and/or advanced placement while still in high school. Students will develop a unified portfolio of original ideas through a variety of media.

## AP STUDIO ART: 3-D DESIGN



Grades 11, 12
1.0 credit

Prerequisite: Art teacher recommendation, Ceramics I and one of the following: Ceramics II, Studio Art I, Studio Art II, Creative Fashion I, Creative Fashion II

AP Studio Art: 3-D Design meets National Standards allowing students to earn college credit and/or advanced placement while still in high school. Students will develop a unified portfolio of original ideas through a variety of media.

## AP DRAWING



Grades 11,12
Prerequisite: Art teacher recommendation; Drawing I, Drawing II and Studio Art I

AP Drawing meets National Standards allowing students to earn college credit and/or advanced placement while still in high school. Students will develop a unified portfolio of original ideas through drawing.

## AP ART HISTORY



Grades 11, 12
Prerequisite: Art Appreciation/Design, Social Studies/ELA teacher recommendation
AP Art History meets National Standards allowing students to earn college credit and/or advanced placement while still in high school. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art.

This course is designed to create the digital school magazine, produced biannually. The production of the magazine emphasizes writing style and technique, as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, captions, photography, and photojournalism; and teach students the principles of graphic design, layout, and digital publishing.

## BUSINESS \& TECHNOLOGY

The Business/Marketing, Information Technology and Communication \& Audio/Visual Technology Department is committed to preparing our students for leadership positions in the $21^{\text {st }}$ century. Our goal is to provide a broad business background, entrepreneurial zeal, up-to-date technology opportunities, and a learning track for students interested in computer science.

## BUSINESS COURSES

| Course | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Personal Finance (required course) | 12 | No Prerequisite |
| Introduction to Business | $9,10,11,12$ | No Prerequisite |
| Business Law | $9,10,11,12$ | No Prerequisite |
| Small Business Management | $10,11,12$ | Any Business course |
| International Business (WHS) | $10,11,12$ | No Prerequisite |
| Accounting I | $9,10,11,12$ | No Prerequisite |
| Accounting II | $10,11,12$ |  |
| Sports \& Entertainment Marketing | $9,10,11,12$ |  |

## PERSONAL FINANCE

Grade 12

Personal Finance, a required course for seniors, provides students with the financial skills necessary to help them in their everyday lives. In this course, students will learn to manage money, and build wealth in order to financially attain the lifestyle they desire. The importance of being financially literate is crucial to success and stability. Students will attain the knowledge and skills necessary to learn concepts related saving, budgeting, staying out of debt, taxes, insurance, etc.

## INTRODUCTION TO BUSINESS

Grades 9, 10, 11, 12

This course introduces students to the world of business and sets a solid foundation for high school, college, and career. Students will be engaged in teamwork, presentations, computer-related activities, and current events while learning the following topics: economic resources and systems, operating a business, ethics and responsibilities, marketing, government regulations, and managing financial and technological resources. Students will discuss and apply business ethics and social responsibility necessary to become better-informed consumers, employees, and citizens. The Business Plan Unit helps students acquire sound values and acceptable attitudes regarding their personal lives and on-the-job success. The knowledge obtained in this class is practiced and reinforced throughout the course and is transferable to other courses as well as everyday life.

## BUSINESS LAW

Grades 9, 10, 11, 12
Business Law is useful for all students because all students eventually assume roles as citizens, workers, and consumers in society. Legal knowledge is applied in a fun and meaningful way through debate, guest speakers, Internet research and the mock trial process. Controversial issues and current legal events are highlighted within each unit. Students will discuss, evaluate, and role-play civil and criminal business and finance cases. This course introduces legal issues faced by businesses including legal rights and responsibilities, labor management, environmental issues, technology, copyright, international commerce, and cyber law. Topics include constitutional, statutory, case and administrative laws, laws for minors, civil and criminal law, court jurisdictions, and trial procedures. This course is a must for anyone planning a career in business or law.

## SMALL BUSINESS MANAGEMENT

Grades 10, 11, 12
.50 credit
Prerequisite: Any Business course

Small Business Management is designed for students who dream of owning their own business or those who are curious about how an idea can become profitable. Learn about how business decisions are made, what makes a good business plan, how to get financing for a project, and how to be competitive using customer service skills. Simulations, role-playing, and other hands on activities will take students through the real nuts and bolts of how a business starts and grows. Emphasis is placed on creativity in business as students use skills gained in previous business classes.


#### Abstract

America's future is rooted in the global economy. This course gives students an advantage in securing employment in the international marketplace, provides students with a global perspective of economics, political structure and culture, and will open their eyes concerning globalization's impact on day-to-day living and personal finance. Students will learn the customs, cultures, business practices, and legal and ethical issues in other countries to provide a broad global perspective. Students will practice currency conversion, develop international marketing strategies, create import and export plans, and examine international trade agreements. This course makes students aware of the growing need for becoming active in a global business economy and provides a solid foundation for college courses in business and international studies.


## ACCOUNTING I <br> 

Grades 9, 10, 11, 12

Accounting is an essential skill for running all kinds of businesses, managing your own money, and building organizational skills. This course is taught in a computer lab and will provide the skills a business owner needs to track and control monies coming in and going out. It includes simulations using accounting software. Learn accounting basics, payroll, financial records and statements, and tracking business checking accounts. This course is a must for students who dream of owning their own business or majoring in a business program in college.

## ACCOUNTING II

Grades 10, 11, 12
.50 credit
Prerequisite: Accounting I
Accounting II builds upon the skills learned in Accounting I. This course is taught in a computer lab and focuses on corporate accounting as well as how to track international and Internet sales. Computerized simulations will reinforce students' skills and prepare them for business ownership and college business courses.

# SPORTS \& ENTERTAINMENT MARKETING 

Grades 9, 10, 11, 12

Sports \& entertainment sales and marketing professionals work with sporting organizations, entertainment complexes and the non-profit sector. This course will provide a foundation that covers industries such as advertising, travel and tourism, retail and merchandising, sports and entertainment, and Internet and social media marketing. Students apply their knowledge and gain practical experience in planning, organizing and implementing a school event. What makes this class interesting are hands-on activities related to sports marketing, event management, theme parks, push advertising, social media, public relations, and product endorsement. Students should take this course if they are interested in the following career opportunities: sales and marketing manager, account representative, sponsorship coordinator, marketing executive, game day coordinator, sponsorship salesperson, licensing brand manager, community events coordinator or social media coordinator.

| Course | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Web Design (WHS only) | $9,10,11,12$ | Proficiency on Technology Literacy Assessment |
| 2D Animation | $9,10,11,12$ | Proficiency on Technology Literacy Assessment |
| 3D Animation (WHS only) | $9,10,11,12$ | Proficiency on Technology Literacy Assessment |
| Video Production (WHS) | $10,11,12$ | Proficiency on Technology Literacy Assessment |
| Video \& Music Production (EHS) | 11,12 | Proficiency on Technology Literacy Assessment |
| Graphic Design | $10,11,12$ | Proficiency on Technology Literacy Assessment |
| Digital Advertising | $10,11,12$ | Proficiency on Technology Literacy Assessment |
| Digital Journalism | $10,11,12$ | Teacher recommendation from an ELA, <br> Technology, or Art teacher |
| Yearbook I | $10,11,12$ | Previous ELA teacher's recommendation required |
| Yearbook II | 11,12 | Yearbook I |

web design (whs) (은
Grades 9, 10, 11, 12
.50 credit
Prerequisite: Proficiency on Technology Literacy Assessment
Learn how to make Web pages and gain a marketable skill. Students will learn how to create a basic Web page, and then add images, sound, video and a number of design formats and techniques. Use HTML, CSS and JavaScript as well as Web page creation software including Adobe Dreamweaver and Flash. All businesses and many organizations have Web sites today. This course is a must to prepare students for any field in today's world.

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Proficiency on Technology Literacy Assessment
Phineas \& Ferb, Fairly ODD Parents, or Foster's Home for Imaginary Friends are great examples of 2D animation. In this 2D Animation course, students will explore the skills it takes to create basic 2D animated cartoon shorts. Students will be working on the computer to build animation skill techniques, as they also learn basic theory and mechanics behind animation development (like drawing skills, principles, character design, layout and storyboarding).

3D ANIMATION (WHS)


Grades 9, 10, 11, 12
.50 credit
Prerequisite: Proficiency on Technology Literacy Assessment
3D Animation is a current trend. Students may have played video games such as Call of Duty, Gears of War and F.E.A.R. or have seen Avatar, the Harry Potter series, or even Toy Story. This 3D Animation course will focus on the basic skills used to develop 3D Animation. Throughout the course, students will learn to model 3D objects, apply materials, apply virtual cameras and lighting, and animate using rigid bodies, controllers and modifiers. This course builds an appreciation of all that's behind the scenes for the video games and movies we experience today.

## VIDEO PRODUCTION (WHS)

Grades 10, 11, 12
.50 credit
Prerequisite: Proficiency on Technology Literacy Assessment

This is an advanced computer class using professional video editing applications. This course is designed to introduce students to multimedia and digital video. Students will use video equipment and up-to-date software to learn camera angles, shots and editing, and post-production techniques. The software gives powerful tools at the hands of editors to enable them to create stunning videos. These include filters, motion graphics, special effects and more. The course is for creative and motivated students who want to go to the next level.

## VIDEO AND MUSIC PRODUCTION (EHS)

Grades 11, 12

This course is designed to give students an exciting and rewarding foundational experience in the field of digital media. Through a hands-on approach, students will learn the basics of single-camera vide production, lighting techniques, interview skills, as well as sound engineering and musical production for video purposes. In addition, students will get a glimpse of behind the scenes of live productions such as musical performances where lighting and audio are key ingredients. Students will be working with the most up to date video editing and music editing software in the industry. This course provides an experience in both technical and creative aspects and will be taught by teachers from the Music department and the Business \&Technology departments.

Grades 10, 11, 12
Prerequisite: Proficiency on Technology Literacy Assessment
This is an advanced computer class using Adobe Illustrator, a software application for creating drawings, illustrations, and artwork using a Windows or MacOS computer. Illustrator is widely used by graphic designers, web designers, visual artists, and professional illustrators throughout the world to create high quality artwork. Illustrating digitally is an advanced skill learned in this course.

GRAPHIC DESIGN (EHS)


Grades 10, 11, 12
Prerequisite: Proficiency on Technology Literacy Assessment
This is an advanced computer class using Adobe Illustrator, a software application for creating drawings, illustrations, and artwork using a Windows or MacOS computer. No prior Mac experience is needed. Illustrator is widely used by graphic designers, web designers, visual artists, and professional illustrators throughout the world to create high quality artwork. Illustrating digitally is an advanced skill learned in this course. In addition, Adobe Photoshop will be mastered by creating images, artwork, and visual illusions. Posters, flyers, and magazine covers are among some of the projects created in this course.

## DIGITAL ADVERTISING (WHS)



Grades 10, 11, 12
.50 credit
Prerequisite: Proficiency on Technology Literacy Assessment
This is an advanced computer class using Adobe Photoshop to focus on digital advertising. Students are exposed to image editing and photo retouching using design software for use on Windows or MacOS computers. Photoshop offers users the ability to create, enhance, or otherwise edit images, artwork, and to create visual illusions. Adobe InDesign is also used in this course as a desktop publishing and typesetting software application to create posters, flyers, brochures, magazines, etc.

## DIGITAL JOURNALISM



Grades 10, 11, 12
Prerequisite: Teacher Recommendation from an ELA, Technology, or Art teacher
This course is designed to create the digital school magazine, produced biannually. The production of the magazine emphasizes writing style and technique, as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility, develop students' skills in writing and editing stories, headlines, captions, photography, and photojournalism; and teach students the principles of graphic design, layout, anf digital publishing.

Grades 10, 11, 12
1.0 credit

Prerequisite: Previous ELA teacher's recommendation is required
Yearbook I is a journalism course which emphasizes writing style and technique as well as production values and organization. Yearbook I introduces students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines and captions; and teach students the principles of production design, layout and printing. Photography, photojournalism, and digital technology skills will be included.

YEARBOOK II
Grades 11, 12
1.0 credit

Prerequisite: Yearbook I
Yearbook II is a journalism course which emphasizes writing style and technique as well as production values and organization. In Yearbook II, students will continue to explore the concepts of newsworthiness, and press responsibilities; advance students' skills in writing and editing stories, headlines and captions; and teach students more advanced principles of production design, layout, and printing. More advanced photography, photojournalism, and digital technology skills will be included.

| Courses | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Computer Science Fundamentals | 9 | Proficiency on Technology Literacy Assessment |
| Introduction to Python <br> Programming | $9,10,11,12$ |  |
| *Introduction to Java <br> Programming | $9,10,11,12$ |  |
| *C++ Programming | $10,11,12$ |  |
| *Advanced Java Programming | $10,11,12$ | Computer Science Fundamentals, Introduction to <br> Java or Introduction to Python |
| *AP Computer Science Principles | 11,12 | Introduction to Java and Advanced Java or Teacher <br> Recommendation |
| *AP Computer Science A Java | 11,12 |  |

A student who successfully completes a course in the area of information technology during grades nine through twelve shall be permitted to apply up to one credit earned for successful completion of such course to satisfy the student's mathematics or science credit requirement for graduation, provided, that the governing body of the student's public high school shall have discretion to determine the graduation credit requirement to which the credit earned by the student shall be applied.
*Course will count as a math elective

## COMPUTER SCIENCE FUNDAMENTALS

## Grade 9



## Prerequisite: Proficiency on Technology Literacy Assessment

Computer Science Fundamentals teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. The course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive making it appealing for new coders. Students learn the fundamentals of programming with an emphasis on problem solving and logical thinking. Topics covered include: graphics, animation and games, data structures, and more.

Introduction to Python teaches the fundamentals of computer programming as well as some advanced features of the Python language. Students use what they learn in this course to build simple console-based games. Learn the basics of programming in Python and gradually experience the power of some of Python's more advanced features to make games and solve real-world problems.
*INTRODUCTION TO JAVA PROGRAMMING
Grades 9, 10, 11, 12

This is the programming course a student should take before taking the C++ course. Students learn to write computer programs using the JAVA language. By the end of the course, students will learn the Java programming skills necessary to write computer programs that implement graphics (MS Paint, picture manipulation); games that incorporate logic (Connect 4, Sudoku, Hangman, puzzles); game show applications (Wheel of Fortune, Jeopardy); animation-based applications (Sonic, Mario, Asteroids); and real-world applications (tutorials to help people, simulations).

Grades 10, 11, 12
1.0 credit

By the end of this course, students will be able to program average games using the C++ language. This class moves at a faster pace than Intro to Java and utilizes and improves upon the logic skills learned in that course. By the end of this course, students will be able to write almost any program using the $\mathrm{C}++$ language.

## *ADVANCED JAVA PROGRAMMING

Grades 10, 11, 12
1.0 credit

This course is a continuation from the end of Intro to Java. Students will learn more complex data structures to write the computer programs they desire. One dimensional, two dimensional arrays, and programmer defined objects will be emphasized.

## *AP COMPUTER SCIENCE PRINCIPLES

Grades 11, 12
1.0 credit

Prerequisite: Computer Science Fundamentals and Introduction to Java or Introduction to Python
AP Computer Science Principles is one of the newest AP courses from the College Board. This course introduces students to the foundational concepts of computer science and explores the impact computing and technology has on our society. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles gives students the opportunity to explore several important topics of computing using their own ideas and creativity, use the power of computing to create artifacts of personal value, and develop an interest in computer science that will foster further endeavors in the field.

## *AP COMPUTER SCIENCE A (JAVA)

Grades 11, 12


Prerequisite: Introduction to Java and Advanced Java or teacher recommendation
Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science A provides students with the logical, mathematical, and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. This course covers such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.

The English Language Arts Department offers two divisions of instruction: the required sequence and the elective series. Guidance counselor and teacher recommendations, test scores, post-secondary education and career plans, course prerequisites, and previous achievement are used to determine appropriate course selection. The Advanced Placement Literature and Composition and Advanced Placement Language and Composition courses are offered to juniors and seniors who qualify and express interest. (Previous English teacher's assessment, completed application form, and a writing sample must be submitted for consideration for admission to this course.)

The elective series provides students with additional offerings in areas of personal interest. Students are eligible for electives as listed; some electives are available to juniors and seniors only.

ENGLISH AS A SECOND LANGUAGE ESL


Grades 9, 10, 11, 12
English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. Three levels are addressed within the program (beginning, intermediate, and advanced). These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States. This course fulfills the grade level English Language Arts (ELA) requirement for non-English speaking students.

## ELEMENTS OF LITERACY



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## Grades 9, 10

Prerequisite for admission to Elements of Literacy - Students are selected based upon teacher recommendation and assessment results. Students in $10^{\text {th }}$ grade who are also enrolled in Algebra IB Enhancement will be placed into an Enhancement period which includes Algebra IB Enhancement and ELA Enhancemet (also known as Elements of Literacy.)

This course is offered to ensure that all students have the requisite reading skills upon graduation. This course offers activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Students develop skills in decoding, oral language, phonics, phonological awareness, vocabulary, encoding, comprehension, and strategic reading. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills. Ongoing assessment will tailor instruction and accelerate learning. NOTE: Eligible students will be placed into Elements of Literacy $9 \mathrm{~A} / 10 \mathrm{~A}$ for the fall semester ( .50 credit). Students who do not test out of Elements of Literacy $9 \mathrm{~A} / 10 \mathrm{~A}$ after the fall semester will be placed into Elements of Literacy $9 \mathrm{~B} / 10 \mathrm{~B}$ for the spring semester ( .50 credit). Students identified as needing additional support by their ELA teacher during the fall semester may have Elements of Literacy $9 \mathrm{~B} / 10 \mathrm{~B}$ added to their schedule for the spring semester. Elements of Literacy will serve as a mandatory elective.

KEYSTONE LITERATURE TUTORIAL


Prerequisite - Students are selected based upon not demonstrating proficiency on the Keystone Literature exam and/or English Language Arts (ELA) 10.

The Keystone Literature Tutorial is an alternative way for a student to graduate if he/she does not demonstrate proficiency on the Keystone Literature Exam. The Keystone Literature Tutorial will provide support to students in demonstrating their ability to meet the academic standards at a proficient or advanced level. Students may also be required to retake the Keystone Literature Exam. Successful completion of the Keystone Literature Tutorial may fulfill the required ELA 10 course credit. Proficiency on the Keystone Literature exam retest or successful completion of the Keystone Literature Tutorial will meet the local graduation requirement.

## ENGLISH LANGUAGE ARTS (ELA) 9

Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Students are actively involved in the study of various literary genres, vocabulary/spelling, composition, and public speaking. The intensity of instruction is especially increased in the study of literature and composition. Oral discussion is an integral part of literature courses and written compositions are required.

## HONORS ELA 9: Introduction to Literature and Composition (NCAA)



Prerequisites: Previous ELA teacher's assessment, completed application form, and a writing sample must be submitted for consideration for admission to this course.

Honors ELA 9 Introduction to Literature and Composition is designed for those students who consistently demonstrate high interest and achievement in English Language Arts. Students are actively involved in the study of various literary genres, vocabulary/spelling, composition, and public speaking. The intensity of instruction is especially increased in the study of literature and composition. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. NOTE: All students enrolled in this course are required to take the Keystone Literature Exam.

ACADEMIC ELA 9: Introduction to Literature and Composition (NCAA)

1.0 credit

Academic ELA 9 is designed to prepare students for the post-secondary education or career of their choice. Students are actively involved in a study of various literary genres, vocabulary/spelling, composition, and public speaking. Regular writing assignments are required, and students are expected to maintain the reading schedule established by their instructor. This course will offer additional support to students as needed.

## ENGLISH LANGUAGE ARTS (ELA) 10

American Literature is a survey of seminal American literature. Students improve their critical- thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses and written compositions are required.

## HONORS ELA 10: American Literature and Composition (NCAA)



Prerequisite: Previous ELA teacher's assessment and recommendation is necessary.
Honors ELA 10 is designed for those students who consistently demonstrate high interest and achievement in English Language Arts. American Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. The intensity of instruction is especially increased in the study of literature and composition. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. NOTE: Students enrolled in this course are required to take the Keystone Literature Exam, if they did not take the exam in ELA 9.

## ACADEMIC ELA 10: American Literature and Composition (NCAA)



Academic ELA 10 is designed to prepare students for the post-secondary education or career of their choice. American Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. Regular writing assignments are required, and students are expected to maintain the reading schedule established by their instructor. This course will offer additional support to students as needed. NOTE: All students enrolled in this course are required to take the Keystone Literature Exam.

## ENGLISH LANGUAGE ARTS (ELA) 11

European Literature courses provide a focus from the Middle Ages to the present. Students will be able to see how earlier works influence later works and how forms and ideas have evolved over time. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses and written compositions are required.

## AP LANGUAGE AND COMPOSITION (NCAA)



Grade 11 ( $12^{\text {th }}$ grade elective only)
1.0 credit Prerequisite: Honors ELA 10 with a minimum final grade of $83 \%$, or Academic ELA 10 with a minimum final grade of $93 \%$. If students have not had Honors ELA 10, a writing sample and teacher recommendation must be submitted for consideration for AP Language and Composition. This course may be taken in place of Honors ELA 11.

Following the College Board's suggested curriculum designed to parallel college-level English courses, the AP Language and Composition course exposes students to works written in a variety of periods, disciplines, and rhetorical contexts. This course emphasizes the interaction of authorial purpose, intended audience, and the subject at hand. Through close reading, discussion, and formal and informal writing, students gain an awareness of the rhetorical choices afforded to writers and an understanding of how to make effective rhetorical choices in their own writing. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. An extensive research paper is required.

AP Language and Composition is designed for those students who consistently demonstrate high interest and achievement in English Language Arts and are committed to preparing for the AP Language and Composition test.

## HONORS ELA 11: European Literature and Composition (NCAA)



Prerequisite: Previous ELA teacher's assessment and recommendation is necessary.
Honors ELA 11 is designed for those students who consistently demonstrate high interest and achievement in English Language Arts. European Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. The intensity of instruction is especially increased in the study of literature and composition. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. An extensive research paper is required.

## ACADEMIC ELA 11: European Literature and Composition (NCAA)



Academic ELA 11 is designed to prepare students for the post-secondary education or career of their choice. European Literature courses provide a survey of European Literature from Middle Ages to the present. European Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. Regular writing assignments are required, and students are expected to maintain the reading schedule established by their instructor. A research paper is required. This course will offer additional support to students as needed.

## ENGLISH LANGUAGE ARTS (ELA) 12

World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses and written compositions are required.

## AP LITERATURE AND COMPOSITION (NCAA)



Prerequisite: Honors ELA 11 with a minimum final grade of $83 \%$, or Academic ELA 11 with a minimum final grade of $93 \%$ or successful completion of AP Language and Composition. If students have not had Honors ELA 11, a writing sample and teacher recommendation must be submitted for consideration for AP Literature and Composition.

Following the College Board's suggested curriculum designed to parallel college-level English courses, the AP Literature and Composition course enables students to critically evaluate literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing). Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. An extensive research paper (multigenre project) is required.

AP Literature and Composition is designed for those students who consistently demonstrate high interest and achievement in English Language Arts and are committed to preparing for the AP Literature and Composition test.

Prerequisite: Previous ELA teacher's assessment and recommendation is necessary.
Honors ELA 12 is designed for those students who consistently demonstrate high interest and achievement in English Language Arts. World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. World Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. The intensity of instruction is especially increased in the study of literature and composition. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. An extensive research paper (multi-genre project) is required.

ACADEMIC ELA 12: World Literature and Composition (NCAA)

1.0 credit

Academic ELA 12 is designed to prepare students for the post-secondary education or career of their choice. World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. World Literature is the course focus, but students are actively involved in the study of literature, vocabulary/spelling, composition, and public speaking. Regular writing assignments are required, and students are expected to maintain the reading schedule established by their instructor. A research paper (multi-genre project) is required. This course will offer additional support to students as needed.

## ENGLISH LANGUAGE ARTS ELECTIVES

| Course | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| AP Language \& Composition | 12 | Previous ELA teacher's <br> assessment, recommendation, and <br> successful completion of Honors ELA 11 |
| Comedy and Satire | 11,12 | No Prerequisite |
| Drama I (WHS Only) | $9,10,11,12$ | No Prerequisite |
| Drama II (WHS Only) | $9,10,11,12$ | Drama I |
| Fairy Tales, Myths \& Legends | $9,10,11,12$ | No Prerequisite |
| Media Critic (EHS Only) | 11,12 | No Prerequisite |
| Novel to Film | 11,12 | No Prerequisite |
| Speech Communication I | $9,10,11,12$ | No Prerequisite |
| Speech Communication II | $10,11,12$ | Noech Communication I |
| Writer's Workshop I | $9,10,11,12$ | Writer's Workshop I |
| Writer's Workshop II | $10,11,12$ | Previous ELA teacher's recommendation <br> required |
| Yearbook I | $10,11,12$ | Yearbook I |
| Yearbook II | 11,12 | No Prerequisite |
| SAT Preparation | 11 | No Prerequisite |
| Intro to Theater Arts <br> (EHS Only $)$ | $9,10,11,12$ | Intro to Theater Arts |
| Advanced Theater Arts <br> (EHS Only $)$ | $9,10,11,12$ | Recommendation from an ELA, <br> Technology, or Art teacher is required |
| Digital Journalism | $10,11,12$ |  |

## AP LANGUAGE AND COMPOSITION (NCAA)

Grade 12
Prerequisite: Previous ELA teacher's assessment, recommendation, and successful completion of Honors ELA 11. If students have not had Honors ELA 11, a writing sample and teacher recommendation must be submitted for consideration for AP Language and Composition.

Following the College Board's suggested curriculum designed to parallel college-level English courses, the AP Language and Composition course exposes students to works written in a variety of periods, disciplines, and rhetorical contexts. This course emphasizes the interaction of authorial purpose, intended audience, and the subject at hand. Through close reading, discussion, and formal and informal writing, students gain an awareness of the rhetorical choices afforded to writers and an understanding of how to make effective rhetorical choices in their own writing. Weekly writing assignments are required, and students are expected to maintain a rigorous schedule of outside reading. An extensive research paper is required.

AP Language and Composition is designed for those students who consistently demonstrate high interest and achievement in English Language Arts and are committed to preparing for the AP Language and Composition test.

## COMEDY AND SATIRE

Grades 11, 12

From the ancient Greek playwrights to contemporary television and film, Comedy and Satire will offer a historical overview of the recurring themes and issues that continue to amuse us. An essential course for anyone majoring in communications or English language study, Comedy and Satire will present a chronological survey of western humor with pertinent "visits" to Aristophanes' Athens, Chaucer's England, Shakespeare's Globe Theater, eighteenth century London, and the modern sound stage. The classic comedy of radio, television, and text will be explored from the perspective of a visiting observer. Students will be required to create and present comic pieces of their own, some written in response to the works studied in class. Written viewer and reader response is an important requirement of this challenging elective.

## DRAMA I (WHS)



Grades 9, 10, 11, 12
Drama is an introductory drama course which includes a basic history of the theater, class reading and interpretation of monologues and dialogues, the development of original scenes and improvisational skills, the reading and discussion of one act plays, and a variety of projects developed from the literature of the theater. Students will gain experience in basic dramatic techniques and will develop their abilities to use both vocal and body language in interpreting dramatic roles convincingly. Students will benefit from viewing and critiquing local college and professional productions. The literature of the theater will come alive through reader's theater activities.

## DRAMA II (WHS)



Grades 9, 10, 11, 12
.50 credit
Prerequisite: Drama I
Drama II is an advanced drama course which builds upon the skills learned in Drama I. Students will further develop original scenes and improvisational skills to create a variety of advanced projects. Students will gain experience in advanced dramatic techniques and will design a theatrical presentation using the skills gained through Drama I and II.

FAIRY TALES, MYTHS, AND LEGENDS


Grades 9, 10, 11, 12
This engaging course will introduce students to the various fairy tales, myths, and legends that are so commonly found in literature. Through the study of these popular forms of literature, students will develop an understanding of the origins and various versions of well-known narratives and how they relate to classical and contemporary works. A generous dose of popular culture is sampled through examining the tales, myths, and legends as they appear in novels, television, movies, and popular recordings. Regular writing assignments are required.

Grades 11, 12
We live in a world dominated by visual media. Media Critic will explore how - for artistic, commercial, and political reasons -media can inspire, inform, and manipulate audiences through the creative use of narratives, camera images, editing, special effects, and music. Students will critically view, discuss, and report on commercial advertising, classic, historical, satirical, and documentary films, international short films, television programming, in pursuit of a greater understanding of the ways these convey meaning, entertain, express points-of-view, and influence public opinion. Through an analysis of the history, evolution, and impact of visual media on our popular culture, this course seeks to prepare its students to see the world around them from an informed and critical perspective.

## NOVEL TO FILM <br> 

Grades 11, 12
Novel to Film offers a thorough, scholarly examination of classic and contemporary literary works which have been transformed to film. The course offers students a brief overview of the history of motion pictures in an effort to establish a framework for discussion. Whenever possible, complete works or excerpts will be read in support of viewing. Films will range from classics to contemporary efforts. The literature and films will explore techniques and elements essential to both mediums. The mode of instruction will be discussion/group presentation, and reader/viewer response papers will be required on a regular basis.

## SPEECH COMMUNICATION I



Grades 9, 10, 11, 12
Speech Communication I helps students to increase their capacity to communicate effectively and think critically while having fun in the process. Speech Communication encourages students to become more confident speakers, presenters, and conversationalists through a variety of in-class activities. Through class activities, students will have the opportunity to research current issues; write and deliver informative, persuasive, and extemporaneous speeches; and read and interpret selections of prose and poetry. Because effective oral communication is an essential life skill, this course can be of great benefit to any student interested in improving his or her formal speaking ability.

## SPEECH COMMUNICATION II



Grades 10, 11, 12
. 50 credit
Prerequisite: Speech Communication I
Speech Communication II is designed for those students who have taken Speech Communication I and are interested in continuing their development as competent presenters and public speakers. This elective includes a unit in the basics of formal speech and debate competition (debate team participation is not required), a review of basic parliamentary procedure, and expanded opportunities for oral interpretation. In addition, students will engage in several different types of interview and speech activities and utilize current technology to polish presentations for a variety of class projects.

## WRITER'S WORKSHOP I

Grades 9, 10, 11, 12
Writer's Workshop I is an introductory writing course for those students who enjoy writing of all types. The course focuses on fundamental principles like plot, structure, character, voice, dialogue, description, and point of view. Students will create and polish drafts for consideration by small and large group workshops. Further, students will distinguish between and practice the editing and revision of their writing.

WRITER'S WORKSHOP II

Grades 10, 11, 12
.50 credit
Prerequisite: Writer's Workshop I
Writer's Workshop II is an advanced course for students who have completed Writer's Workshop I and will help students to further develop and refine their craft. The course features a variety of sophisticated writing models, and students are encouraged to publish their work in the school's literary magazine. In addition, students will be encouraged to enter their work in a variety of local, regional, and national writing contests.

## YEARBOOK I <br> Grades 10, 11, 12


1.0 credit

Prerequisite: Previous ELA teacher's recommendation is required
Yearbook I is a journalism course which emphasizes writing style and technique as well as production values and organization. Yearbook I introduces students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines and captions; and teach students the principles of production design, layout and printing. Photography, photojournalism, and digital technology skills will be included.

## YEARBOOK II



Grades 11, 12
1.0 credit

Prerequisite: Yearbook I
Yearbook II is a journalism course which emphasizes writing style and technique as well as production values and organization. In Yearbook II, students will continue to explore the concepts of newsworthiness, and press responsibilities; advance students' skills in writing and editing stories, headlines and captions; and teach students more advanced principles of production design, layout, and printing. More advanced photography, photojournalism, and digital technology skills will be included.

## SAT PREPRATION e

 둥우 (Math/Reading)Grade 11
The SAT Prep course is designed to help prepare students for the SAT test for math and reading. Students will take both SAT math for 45 days and SAT reading for 45 days for one semester. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students learn test-taking strategies specific to the exam. Students will work with instructional strategies and materials in both math and reading including online resources, direct and guided instruction in content area skills, samples with explanations, practice tests, and study resources. Resource materials will be available for students in school and at home.

## INTRO TO THEATER ARTS (EHS Only)

## 8 8

Grades 9, 10, 11, 12
Intro to Theater Arts is an introductory drama course which includes a basic history of the theater, class reading and interpretation of monologues and dialogues, the development of original scenes and improvisational skills, the reading and discussion of one act plays and musicals, and a variety of projects developed from the literature of the theater. Students will gain experience in basic dramatic and musical techniques and will develop their abilities to use both vocal and body language in interpreting dramatic roles convincingly. Basics of stage management will foster knowledge of how the backstage crew supports performances. Students will benefit from viewing and critiquing local college and professional productions. The literature of the theater will come alive through the reader's theater activities.

## ADVANCED THEATER ARTS (EHS Only)



Grades 9, 10, 11, 12
.50 credit
Prerequisite: Intro to Theater Arts
Advanced Theatre Arts is an advanced drama course which builds upon the skills learned in Intro to Theater Arts. Students will further develop original scenes and improvisational skills to create a variety of advanced projects. Advanced skills in stage management will provide hands-on experience of working as a stage crew. Students will gain experience in advanced dramatic techniques and will design a theatrical presentation using the skills gained through Intro to Theater and this course.

## DIGITAL JOURNALISM



Grades 10, 11, 12
1.0 credit

Prerequisite: Recommendation from an ELA, Technology, or Art teacher is required
This course is designed to create the digital school magazine, produced biannually. The production of the magazine emphasizes writing style and technique, as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, captions, photography, and photojournalism; and teach students the principles of graphic design, layout, and digital publishing.

## FAMILY AND CONSUMER SCIENCES

Family and Consumer Sciences provide a comprehensive program which integrates math, reading, science and English skills, aptitudes and interests of the students into courses that enhance their career interests. Each experience is a unique opportunity to learn by doing. The curriculum reflects advances and trends in society, science and technology as well as stressing the importance of basic core subject skills. A variety of courses offer students an opportunity to develop life skills, prepare for post- secondary education, establish a positive work ethic and participate in community service. Students may choose from three major career pathways.

Students are provided experiences, which integrate academic skills and principles with practical life application or career potential. Educational expectations are high and core subject comprehension is an integral part of Family and Consumer Science. Each course involves math, reading, reading comprehension, research, problem solving, critical thinking, time management, organizational skills teamwork and individual projects.

| Course | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Child Development I | $10,11,12$ | No Prerequisite |
| Child Development II | 11,12 | Child Development I and grade of $80 \%$ |
| Child Development III | 11,12 (EHS) | Child Development I and Child <br> Development II and min $80 \%$ grade in both |
| Contemporary Foods of the <br> World I | $9,10,11,12$ (EHS) <br> $10,11,12($ WHS) | No Prerequisite |
| Contemporary Foods of the <br> World II | $10,11,12$ | Contemporary Foods of the <br> World I |
| Contemporary Foods of the World <br> III | 11,12 | Contemporary Foods of the World II |
| Creative Fashion I | $9,10,11$ | No Prerequisite |
| Creative Fashion II | $10,11,12$ | Creative -Fashion I |
| Creative Fashion III | 11,12 | Creative Fashion II |

## FASHION TEXTILES

There are three levels of course work available within the Fashion and Textiles area of Family and Consumer Science. These courses are not specific to fashion design however the course explores careers within the field such as: interior design, entrepreneurship, costume design, pattern making, color consultant, personal shopper and many other possibilities.

Grades 9, 10, 11, 12
credit

Creative Fashion I introduces students to the skills, principles and equipment of hand and machine sewing. Students are expected to complete the required differentiated sewing projects using time management skills. Students are also encouraged to work on projects (of their own choice) that challenge their sewing abilities. Fabric and supplies are available to students; however, it may be necessary for students to purchase certain project materials that are not covered under the course specifications. Students should have an understanding of basic math skills such as measurement and geometry as well as reading and comprehension skills. Basic lifetime skills are learned through problem solving, critical thinking and creative expression. This is an introductory course for students interested in pursuing careers in the fashion and textile industry. Areas of study include: tools \& equipment, fabrics, pattern layout \& symbols, machine use and simple construction principles.

CREATIVE FASHION II


Grades 10, 11, 12
.50 credit
Prerequisite: Creative Fashion I
Creative Fashion II offers students the opportunity to experience advanced technology in the textile career, home sewing or entrepreneurship. Students are expected to strengthen their sewing skills by learning about today's technology in the fashion industry through projects that use computerized embroidery and pattern making. Students will practice fashion illustration, window display, over lock sewing machine skills, draping, pattern making, clothing construction, quilting and specialty fabric usage. Though most fabric and supplies are provided for the student, it may be necessary for some supplies to be purchased by the student.


Creative Fashion III is the final course in the textile career pathway. Students are actively involved in preparing for post-secondary education in the field of fashion. Students are expected to perform on a business and professional level by creating projects with a much higher level of difficulty and standard. Sewing skills previously learned will improve from amateur to professional standards of business, design and marketing. A portfolio is established for secondary education or business pursuit. The following areas are part of the course of study: Fashion History, Fashion Designers, Haute Couture Fashion, Fashion Knock-offs, Fiber Testing, Fabric Analysis, Fashion Writing, Pattern Alterations, and Clothing Construction using personal logos and personalized designs. Students are also expected to make their own patterns and designs as well as create these designs as part of the portfolio entry. Though most fabric and supplies are provided for the student, it may be necessary for some supplies to be purchased by the student.

## CHILD CARE AND DEVELOPMENT

The three levels of Child Growth and Development give students the opportunity to explore various aspects of careers related to children. These careers are not limited to Child Care Professionals or teachers of young children. Careers in which knowledge of children is of importance include lawyer, doctor, writer, therapist, architect, or marketing analyst. Throughout the program students build on theories of child development, interact with children, and develop learning programs.

## CHILD DEVELOPMENT I

Grades 10, 11, 12
1.0 credit

This is the introductory course, offering students an opportunity to develop skills for working with children. The focus is on children from prenatal to age 5 . This level includes a unit on prenatal development, infant care, parenting skills, child development theory, and understanding the areas and sequences of growth and development. Safety and caring for a child are essential aspects of this course. Topics in the second half of the year include activities useful for teaching young children. Units include storytelling, dramatic play, writing, math activities, nutrition, and art. Projects are designed from an early childhood education point of view.

## CHILD DEVELOPMENT II <br> 

Grades 11, 12
1.0 credit

Prerequisite: Child Development I and a grade of $80 \%$
This course gives students an opportunity to focus on the school-age child and to explore the world of Special Education. Students plan a theme-based learning center that is developmentally appropriate for a certain age group. They also create bulletin boards, book and activity projects, lesson plans, and peer teaching. At both high schools, students work with preschoolers from the community during our Cardinals Nest and Panthers Den preschool programs for several weeks. They plan, prepare and serve nutritious snacks for the children, emerge in playtime, role-playing and reading to the preschoolers. The Child Development II students also build positive relationships with the parents of the preschoolers by demonstrating socially responsible behavior. Students taking Child Development II must possess good time-management skills and initiative as this is a hands-on, project-oriented course.

Child Development III will expand upon concepts studied in its prerequisite. Students will work with both preschool, elementary, and special education students within our school district. Students will create and deliver age appropriate lesson plans and apply learning outcomes and standards within the lessons. Students will learn and apply classroom management skills, organizational skills, and preparation skills which are needed to be an effective teacher. The Child Development III students will engage in positive relationships with preschool parents by engaging socially responsible and ethical behaviors which are needed in the workforce. Students will build upon time management skills to meet workforce style deadlines and initiatives as this is a hands on, project-oriented course with the creation of a portfolio/professional binder.

## CONTEMPORARY FOODS OF THE WORLD I

Grades 9, 10, 11, 12 (EHS)
Grades 10, 11, 12 (WHS)
Contemporary Foods of the World I is the first course in the culinary path which provides students with the opportunity to develop basic food preparation skills and understanding. Students will study kitchen safety and sanitation, measurement, basic food preparation skills, as well as nutritious meal planning. Units of study include: Grain Foods, Vegetables, Fruits, Dairy Products, Eggs, Meat, Poultry, Salads, Casseroles, Soups, Breads, Cakes, Cookies, Pies, and Candies. Students are expected to successfully complete quizzes, tests, classwork and research in order to participate in lab activities. The student is encouraged to develop consumer strategies and skills, and apply nutrition analysis. These and other important factors related to food and nutrition are offered in this course. Students are expected to perform basic math skills as well as reading and comprehension skills. Students should have the ability to follow both written and verbal directions.

## CONTEMPORARY FOODS OF THE WORLD II



Grades 10, 11, 12
Prerequisite: Successful completion of Contemporary Foods of the World I and a grade of $80 \%$.
Contemporary Foods of the World II is designed to focus on the cultural experiences while continuing to perfect culinary skills. Students will study foods and nutrition from the United States as well as from around the world. Students will research the history, traditions, and food of the many regions of the United States as well as other cultures during the course. Students will research the geography, culture, religion, tradition, heritage and history of the countries and prepare a detailed presentation showing how these factors affect the food for that region. Analysis of the commonalties and uniqueness of eating patterns are an essential component of the course. This course is the second in the culinary path which prepares students for careers in the Culinary Industry and Hospitality Industry.

## CONTEMPORARY FOODS OF THE WORLD III

Grades 11, 12
Prerequisite: Successful completion of Contemporary Foods of the World II and a grade of $80 \%$.
This is an elective course that is based on a vocational and technical education program. Students who are interested in working at a higher skill level of culinary preparation and planning will work to complete a level of work associated with the industry. The course will require a semester long commitment that will culminate in the planning and implementation of a catered luncheon event. This is an intensive experience where culinary skills are expected as well as vocabulary, math, time management, organization, communication skills and leadership.

# HEALTH, PHYSICAL EDUCATION \& SAFETY 

## HEALTH

Our goal is to develop health literacy in all students. Health literacy is the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways that are health-enhancing. Health-literate individuals understand scientifically based principles of health promotion and disease prevention, incorporate that knowledge into personal health-related attitudes and behaviors, and make good health a personal priority.

## Health Education Philosophy:

To provide all students with the skills and knowledge to promote responsible lifetime decision making and contribute to a healthy and safe society.

## Overview:

Health Education in the Pocono Mountain School District is comprehensive, accurate, up-to-date and relevant. The Health Education program equips students with the skills necessary to weigh options, make responsible decisions and develop behaviors that promote healthful living. Students are encouraged to assess their attitudes and behavior patterns and to understand the impact their life choices have on their communities and on their own well-being.

## Grade 9

Topics in $9^{\text {th }}$ grade Health range from students using communication skills which encourage responsible decision making to personal and social skill development. Content/Skills taught will relate to Human Growth and Development, Personal Health/Family/Social Health, Mental Health and Disease Prevention and Control. Topics discussed include healthy/unhealthy relationships, reproduction, birth control, child birth, abstinence (is promoted and defined as the most effective means of preventing pregnancy and Sexually Transmitted Infections), decision making, and social/personal skills. Students will be provided with up-todate skills and knowledge relevant to today's rapidly changing society.

## Grade 12

Accurate up-to-date health information will be taught pertaining to Family/Personal/Social Health, Substance Abuse Prevention, Disease Prevention and Control, Mental Health, and Human Growth and Development. The course will include classroom experiences that help students acquire the knowledge, attitudes and skills necessary for making health promoting decision, achieving health literacy, adopt health enhancing behaviors and promoting health in others. Students will be provided with instruction that is relevant to today's rapidly changing world. Abstinence will be stressed when dealing with any content or concepts taught related to sexual behavior and relationships. Students will be encouraged to make healthy decisions concerning sexual behavior.

## PHYSICAL EDUCATION

## Physical Education Philosophy:

To expose all students to a variety of physical activities, sports, and fitness concepts to better provide enjoyment of physical activity, as well as build social, psychomotor, and cognitive skills that will lead to an active and healthy life.

## Overview:

Physical Education contributes to the physical, intellectual, social and emotional well-being of the student. Our curriculum is devoted to purposeful instruction in developmentally appropriate activities to promote a positive self-concept through fitness, sport, dance and lifetime activities. Each student is able to achieve success according to his/her ability. Participation and involvement are required at all levels. Health related fitness is the goal for all students. The curriculum intent is to provide students of all abilities and interests with a variety of movement experiences that will lead to an active and healthy life. Activities are taught in a coeducational environment. The "Fitnessgram/Fitness test" is administered each year with the focus on health-related fitness concepts. Students needing adapted physical education are scheduled into a program tailored to meet their needs.

## Grades 9-12

## COURSE OFFERINGS

## Fitness

Aerobics
Cross Country Skiing
Dance
Fitness/Circuit Training
Mountain Biking
Snow Shoeing
Track and Field
Weight Training
Ultimate Frisbee

## Net/Wall Games

Badminton
Pickleball
Table Tennis
Tennis
Volleyball

## Target Games

Frisbee Golf
Bowling
Croquet
Golf
Archery
Bocce
Curling

## Invasion Games

Basketball
Flag Football
Flickerball
Floor Hockey
Lacrosse
Soccer
Speedball
Tchoukball
Team Handball

## Adventure Activities

Cooperative Games/Activities
Hiking
Team Building Activities
Kin Ball

## Striking/Fielding Games

Wiffleball
Softball

HEALTH, PHYSICAL EDUCATION \& SAFETY ELECTIVES

| Health Electives | Grades | Prerequisites |
| :---: | :---: | :---: |
| Healthy Lifestyle Management | 9,10,11,12 | No Prerequisites |
| Health Emergencies | 10,11,12 | No Prerequisites |
| Fitness/Sport Nutrition and Physiology | 10,11,12 | No Prerequisites |
| Physical Education Electives |  |  |
| Movement and Sport Related Fitness I | 10,11,12 | No Prerequisites |
| Movement and Sport Related Fitness II | 10,11,12 | Movement and Sport Related Fitness I |
| Strength and Conditioning I | 9,10,11,12 | No Prerequisites |
| Strength and Conditioning II | 9,10,11,12 | Strength and Conditioning I \& grade of 80\% |
| Strength and Conditioning III | 10,11,12 | Strength and Conditioning II \& grade of 80\% |
| Advanced Strength and Conditioning | 10,11,12 | Strength and Conditioning III grade of 80\% |
| New Games and Adventures I | 9,10,11,12 | No Prerequisites |
| New Games and Adventures II | 9,10,11,12 | New Games and Adventures I \& grade of 80\% |
| Wellness and Fitness | 9,10,11,12 | No Prerequisites |
| Learn to Swim | 9,10,11,12 | No Prerequisites |
| Lifeguarding | 12 | No Prerequisites |
| Lifeguard Certification | 10,11,12 | No Prerequisites |
| Aquatic Sport and Fitness I | 9,10,11,12 | No Prerequisites |
| Aquatic Sport and Fitness II | 9,10,11,12 | Aquatic Sport and Fitness I \& grade of $80 \%$ |
| Advanced Aquatic Sport and Fitness | 10,11,12 | Aquatic Sport and Fitness II \& grade of $80 \%$ |
| Conflict Responses, Self-Awareness \& Self Protection Skills I (EHS only) | 10,11,12 | Successful completion of grade 9 Physical Education |
| Conflict Responses, Self-Awareness \& Self-Protection Skills II (EHS only) | 10,11,12 | Conflict Responses, Self-Awareness \& SelfProtection Skills |

## HEALTH ELECTIVES

HEALTHY LIFESTYLE MANAGEMENT

Grades 9, 10, 11, 12

The main focus of this course is changing behavior of each individual learner. Students will be in a variety of settings ranging from a classroom, to a food lab, to a fitness center. Teachers from the Health and Physical Education department along with the Family and Consumer Science department will work together to assist the students in this unique course. Topics covered will include information about principals of physical fitness, weight management, food choices, menu design and healthy food preparation.

## HEALTH EMERGENCIES

Grades 10, 11, 12
This course will provide students with an overview of life saving measures for a variety of emergency situations. Students will assess emergency situations and learn how to provide basic first aid. Students will have the opportunity to become certified in First Aid Instruction and Cardiopulmonary Resuscitation (heart-lung resuscitation).

## FITNESS/SPORT NUTRITION AND PHYSIOLOGY

Grades 10, 11, 12
This course will help students to understand the function of the nutrients in the body and how these nutrients affect health, fitness and athletic performance. Students will be provided with an overview of the importance of nutrients, the understanding of how these nutrients can influence exercise performance and good health for both athletes and active individuals. Key content addressed is to understand why proper nutrition helps athletes prevent injury, enhance recovery, improve daily workouts, and maintain optimal health and body weight.

## PHYSICAL EDUCATION ELECTIVES

## MOVEMENT AND SPORT RELATED FITNESS I

Grades 10, 11, 12

Health related fitness is a goal for all students. This standards-based elective's intent is to provide students of all abilities and interests with a variety of movement experiences that will lead to an active and healthy life. Activities are taught co-educationally and include fitness, net/wall games, target games, invasion games, adventure activities, and striking and fielding games.

# MOVEMENT AND SPORT RELATED FITNESS II 

Grades 10, 11, 12

Prerequisite: Successful completion of Movement \& Sport Related Fitness I and a grade of 80\%
The main focus of this course is high intensity movement. The course is tailored toward students who have high levels of fitness and an intense desire to participate in physical education. Activities are taught coeducationally and include fitness, net/wall games, target games, invasion games, adventure activities, and striking and fielding games.

## STRENGTH \& CONDITIONING I

Grades 9, 10, 11, 12
This course provides students the opportunity to identify and focus on specific individualized training principles for various goals. The course is designed for all students, whether their goals are sport specific, activity driven or simply fitness based. The focus of this course is to apply fitness training principles learned in this course to create an individualized training program. The student will be able to implement the program throughout the semester with guidance to make appropriate changes as implementation progresses.

STRENGTH \& CONDITIONING II
Grades 9, 10, 11, 12
.50 credit
Prerequisite: Strength and Conditioning I and a grade of $80 \%$
This course provides students with a solid background in Strength and Conditioning to design and implement a personalized training program for themselves. Students will be introduced to advanced training methods and have the opportunity to try these methods and incorporate them into their own personalized training routines.

## STRENGTH \& CONDITIONING III

Grades 10, 11, 12
.50 credit
Prerequisite: Strength and Conditioning II and a grade of $80 \%$
This course will provide students with a solid background in Strength \& Conditioning to design and implement a personalized training program. Students will review advanced training methods and will incorporate these methods into their own personalized training routines. There will be a focus on developing and following a regimented fitness plan. The plan will meet the needs of the individual learner and focus on the desired collaborated outcome of the student and instructor.

# ADVANCED STRENGTH AND CONDITIONING 

Grades 10, 11, 12
.50 credit
Prerequisite: Strength and Conditioning III and a grade of $80 \%$
This is the final course in the series. It will focus on the student's continued development of their own program and developing new programs. The developed programs will have an emphasis on meeting the needs and goals of any and all individuals regardless of level of fitness. Upon completion of this course, the student will be empowered to develop positive behaviors in fitness, wellness and movement activity for a lifetime.

## NEW GAMES \& ADVENTURES I

Grades 9, 10, 11, 12
.50 credit

This course provides students the opportunity to participate in activities that traditionally have not been available in physical education. The course is designed for all students. The strategies and skills for each activity will be introduced and reviewed. The focus of this course is to show new ways to be physically active. Students will participate in and learn activity principles for snow shoeing, hiking, Frisbee golf, cooperative games \& activities, Kin ball, Team building, aquatic activities and low ropes course elements. Students will also have the opportunity to create their own new games and activities using principles from other games and/or sports.

## NEW GAMES \& ADVENTURES II

Grades 9, 10, 11, 12
.50 credit
Prerequisite: New Games \& Adventures I and a grade of $80 \%$
This course provides students the opportunity to participate in new games and adventure activities in physical education. The course is designed for all students and is an extension of New Games and Adventures. Students will participate in non-traditional activities that include team building, cooperative games and activities, building trust, problem solving, hiking, trail running, low ropes elements, designing games and activities, and outdoor adventures.

WELLNESS \& FITNESS
Grades 9, 10, 11, 12

This course provides students the opportunity to expand their knowledge of wellness and fitness in a unique way. Students will spend time learning about nutrition, wellness, exercise, fitness components and putting that knowledge into action. The course is designed for all students who have the desire to live a healthy or healthier lifestyle. "Without your health, everything else in life will be more difficult." The focus of this course is to increase their knowledge of the specific benefits of living a healthy lifestyle.

# LEARN TO SWIM 

Grades 9, 10, 11, 12
.50 credit
Semester Elective

This course is designed for students who have minimal to no swimming experience and would like to learn to swim. The course will focus on the basic water safety techniques, basic skills of floating, proper breathing methods, stroke mechanics, survival techniques and being comfortable in water. The aim of the course is to be a confident swimmer. Strokes learned will vary per student's ability but may include: Front Crawl, Backstroke, Breast Stroke and Side Stroke.

## LIFEGUARDING

Grade 12
Full year course - It would be the 90 days, with 45 health days (This would replace/ be an option for seniors to take as their Physical Education course requirement) This course provides students the opportunity to become certified in Lifeguarding/CPR/AED/First Aid. The course is designed for seniors who would like to become certified, rather than taking their traditional physical education during their senior year. Senior health will be included in this course.

## LIFEGUARD CERTIFICATION

Grades 10, 11, 12

This course provides students the opportunity to become certified in Lifeguarding/CPR/AED/First Aid. Lifeguarding Certification would be the focus of this course. This class would be the same course as the senior Lifeguarding course, without the health component. The course is designed for students of working age to receive lifeguarding certification.

This course provides students the opportunity to participate in aquatic based activities. Classes will consist of Water Polo, Snorkeling, Canoeing/Kayaking, Basketball, Pool Specific games, Deep water running (with float belts), Water dumbbell workouts, and other pool related activities. The course is designed for everyone, not just advanced swimmers.

# AQUATIC SPORT AND FITNESS II 

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Aquatic Sport and Fitness I and a grade of 80\%

This course is designed for experienced/advanced swimmers. The focus of the course will be on more advanced aquatic and fitness-based activities. Activities will include, but are not limited to deep water snorkeling, deep water aquatic games, aquatic group fitness activities and stroke refinement.

## ADVANCE AQUATIC SPORT AND FITNESS

Grades 10, 11, 12
.50 credit
Prerequisite: Aquatic Sport I and II and a grade of $80 \%$
This course is designed for experienced/advanced swimmers. The focus of the course will be on advanced aquatic and fitness-based activities. Fitness and stroke development will be refined. Students will participate in Aquatic based activities using skills taught in previous Aquatic courses.

## CONFLICT RESPONSES, SELF-AWARENESS \& SELF-PROTECTION SKILLS I



Grades 10, 11, 12 (EHS)

This course is designed to improve the situational awareness of students, empower students to make strategic decisions for their safety and provide students with an opportunity to actively study effective methods of selfprotection. This course will provide students of all abilities with a variety of movement experiences that will lead to a healthier, safer and more physically active life. Topics covered will include information about anatomy, assertive behavior, biomechanical principles, character development, conflict management skills, decision-making skills, fitness, goal setting, law, martial arts, meditation, moral education, motor skill enhancement, safety, self-control, situational awareness training and stress management skills. Practicing mindfulness, developing awareness and staying calm under pressure are all tools that can be utilized in various areas of life. The connection between mind and body will be amplified in the most efficient manner for the safest outcome.

## CONFLICT RESPONSES, SELF-AWARENESS \& SELF-PROTECTION SKILLS II 상 하

Grades 10, 11, 12 (EHS only)
credit
Prerequisite: Conflict Responses, Self-Awareness Enhancement \& Self-Protection Skills Level I and a grade of $80 \%$. Students must also be recommended to take the course by a health and physical education teacher and an administrator.

This course will continue the educational path established in Level I. Students will connect their situational awareness skills, strategic decision-making skills and self-protection skills with new content to enhance their safety. The course will focus on evolving proper mechanics \& coordination, growing technical knowledge, increasing the transitional fluidity between techniques and the development of timing \& sensitivity. Students will continue to explore several cultures, languages and historical concepts. By synergizing mindfulness with the foundational principles of the course, students will raise their self-esteem in a healthy manner and become more efficient at protecting themselves.

## MATHEMATICS

Skills and processes are emphasized in mathematics classes which enable students to evaluate and analyze, think critically, use problem-solving strategies, organize data, apply and synthesize ideas, and express mathematical procedures. Students in the Pocono Mountain School District today will live and work in the 21 st century, in a world dominated by computers, worldwide communication, and a global economy. The workers of tomorrow must be prepared to absorb new ideas, understand patterns and trends, and solve unconventional problems. Students need to see that mathematics is relevant to their lives. Pocono Mountain School District wants students to think mathematics, to understand mathematics, and to use mathematics. If they can do this, our students will have the confidence and the desire to meet the challenges and opportunities of tomorrow.

With the exception of students who successfully complete Algebra I in grade 8, students MUST successfully complete one math course during each of their four years in high school to meet local graduation requirements. Students who successfully completed Algebra I in grade 8 are strongly encouraged to take a math course during grade 12 to help better prepare and transition them for college in STEM and business fields or for general education math classes in other fields.

KEYSTONE ALGEBRA I TUTORIAL


Grades 11, 12
.50 credit
Prerequisite: Students are selected based upon not demonstrating proficiency on the Keystone Algebra I exam and/or Academic Algebra I or Algebra IB.,

The Keystone Algebra I tutorial course is an alternative way for your child to graduate if he/she does not demonstrate proficiency on the Keystone Exam. The Keystone Algebra I Tutorial course will provide support to students in demonstrating their ability to meet or exceed the academic standards at a proficient or advanced level. Students may also be required to retake the Keystone Algebra I exam.

Successful completion of the Keystone Algebra I Tutorial course may fulfill the required Algebra course credit. Proficiency on the Keystone Algebra I exam retest or successful completion of the Algebra I Tutorial course will meet the local graduation requirement.

## HONORS PROGRAM

HONORS GEOMETRY (NCAA)


## Grade 9 <br> Prerequisite: Successful Completion of $8^{\text {th }}$ Grade Algebra I OR teacher/administrative approval

Honors Geometry is an accelerated course which enhances the depth of the regular geometry curriculum. Geometry is a course that emphasizes logical reasoning, spatial visualization skills, and their application to problem solving. Students will write two column deductive formal proofs and use algebraic skills to set up and solve problems based on geometric representation. One of the most important connections in all of mathematics is between geometry and algebra. The interplay between the two strengthens students' abilities to formulate and analyze problems from both within and outside mathematics. Geometry will emphasize an abstract, formal approach to the study of geometry. The course includes topics such as properties of plane and solid figures, deductive methods of reasoning and use of logic, the study of postulates, theorems and proofs, concepts of congruence, similarity, parallel lines perpendicularity, proportion, and rules of angle measurement in triangles.

## HONORS ALGEBRA II (NCAA)



## Grade 10 <br> Prerequisite: Successful Completion of Academic Algebra I and Honors Geometry OR teacher/administrative approval

Honors Algebra II is an accelerated math course which enhances the depth of Algebra and is a continuation of Algebra I. Graphing calculators will play an important role as students interpret graphs, explore their properties, and determine relationships between graphs. The properties of real numbers will be extended. The course includes topics such as set theory, operations with rational and irrational expressions, factoring of rational expressions, in-depth study of linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, graphing of constant, linear, and quadratic equations, properties of higher degree equations, and operations with exponents.

## HONORS PRECALCULUS (NCAA)



Grade 11
1.0 credit

Prerequisite: Successful Completion of Honors Algebra II OR teacher/administrative approval
Honors Precalculus is an accelerated course which combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for Calculus. Functions include the study of functions that are circular, polynomial, logarithmic, and exponential. The focus on understanding the behavior of functions leads to an emphasis on using a graphing calculator. Students will also learn to resolve vectors, use matrices and discover complex numbers are not too complex after all.

## HONORS CALCULUS (NCAA)

Grade 12
Prerequisite: Successful Completion of Functions AND teacher/administrative approval
Students will expand their understanding of functions and the role they play in investigating real-world phenomena. Students will study properties of functions and graphs, limits and continuity, and differential calculus. This course will also include a basic introduction to integral calculus. The central ideas of calculus involve limit, rate of change, and slope of a tangent line. Honors Calculus will help prepare students to take Calculus in college.

## AP CALCULUS AB (NCAA)



Grade 12
Prerequisite: Successful Completion of Honors Functions with a minimum final grade of $83 \%$, OR Academic Functions with a minimum final grade of 93\% AND teacher/administrative approval.

This course is intended for students who have a thorough knowledge of college preparatory mathematics, including advanced topics in algebra, coordinate and analytic geometry, and elementary functions. Students will study properties of functions and graphs, limits and continuity, and differential and integral calculus. The contents of this course satisfy the AP syllabus prescribed by the College Entrance Examination Board. Students who wish to take AP Calculus must have teacher recommendation from their Functions teacher or administrative approval. Students will be eligible and are encouraged to take the advanced placement examination in May.

Note: Students who take AP Calculus may take AP Calculus AB OR AP Calculus BC. Students may NOT take both Calculus courses as there is overlapping content in the courses.

## AP CALCULUS BC (NCAA)



Grade 12
1.0 credit

Prerequisite: Successful completion of Honors Functions with a minimum final grade of $83 \%, A N D$ teacher/administrative approval.

This course is intended for senior students who wish to have an in-depth background in Calculus in preparation for college. The student who successfully completes this course will have a thorough knowledge of first and second semester college level calculus. Students will study properties of functions and graphs, limits and continuity, and differential and integral calculus. In addition to these typical AP Calculus AB topics, other content includes Integration by Parts, Integration by Partial Fractions, L'Hopital's Rule, Improper Integrals, Power Series, Taylor Series, and Parametric, Vector, and Polar Functions. Course content satisfies the AP syllabus prescribed by the College Entrance Examination Board. Students will be eligible and are encouraged to take the advanced placement examination in May.

Note: Students who take AP Calculus may take AP Calculus AB OR AP Calculus BC. Students may NOT take both Calculus courses as there is overlapping content in the courses.

## AP STATISTICS (NCAA)

Grade 12
Prerequisite: Successful completion of Honors Functions with minimum final grade of $83 \%$, OR Academic Functions with a minimum final grade of $93 \%$ AND teacher/administrative approval.

Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Course content will satisfy the AP Syllabus prescribed by the College Entrance Examination Board. Students will be eligible and are encouraged to take the advanced placement examination in May.

## STATISTICS (NCAA)



Grades 11, 12
Prerequisite: Successful completion of Honors/Academic Algebra II OR College Algebra OR teacher /administrative approval

Students who have completed Algebra II may take Statistics as their $11^{\text {th }}$ or $12^{\text {th }}$ grade required math course. Statistical literacy is vital in today's society; numerical "information" confronts us daily. Today's students need to be able to determine whether claims based on numerical information are reasonable and accurate. Statistics focuses on the introduction of the study of statistics and probability. The course will include topics such as basic probability, odds, descriptive statistics (measures of central tendency, presentation of data (including graphs), normal distribution and measures of variability) and inferential statistics (confidence intervals, linear regression and hypothesis testing). This course does not carry Honors weight.

## ACADEMIC PROGRAM

## STUDENTS TAKING ACADEMIC ALGEBRA I IN 9th GRADE

ACADEMIC ALGEBRA I (NCAA)


Grade 9
1.0 credit

Prerequisite: Successful Completion of $8^{\text {th }}$ Grade Essentials of Algebra
Algebra is the language through which most of mathematics is communicated, and it is necessary for further work in nearly all mathematical subjects. This course presents algebraic methods as problem solving tools. The student will learn how to deal with variables, expressions, linear and quadratic equations, linear inequalities, and translating and solving word problems using equations and inequalities. Graphing calculators for making connections and developing concepts will be used as a teaching tool throughout the year. ${ }^{*}$ Note: All students enrolled in this course are required to take the Keystone Exam.

## ACADEMIC GEOMETRY (NCAA)



## Grades 10

1.0 credit

Prerequisite: Successful Completion of Academic Algebra I
Geometry is a course that emphasizes logical reasoning, spatial visualization skills, and their application to problem solving. Students will write two column deductive formal proofs and use algebraic skills to set up and solve problems based on geometric representation. One of the most important connections in all of mathematics is that between geometry and algebra. The interplay between the two strengthens students' abilities to formulate and analyze problems from both within and outside mathematics. Geometry will emphasize an abstract, formal approach to the study of geometry. The course includes topics such as properties of plane and solid figures, deductive methods of reasoning and use of logic, the study of postulates, theorems and proofs, concepts of congruence, similarity, parallelism, perpendicularity, and proportion, and rules of angle measurement in triangles.

## ACADEMIC ALGEBRA II (NCAA)



## Grade 11

1.0 credit

Prerequisite: Successful Completion of Academic Algebra I AND Academic Geometry OR teacher/administrative approval

Academic Algebra II enhances the depth of Algebra and is a continuation of Algebra I. Graphing calculators will play an important role as students interpret graphs, explore their properties, and determine relationships between graphs. The properties of real numbers will be extended. The course includes topics such as set theory, operations with rational and irrational expressions, factoring of rational expressions, in-depth study of linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, graphing of constant, linear, and quadratic equations, properties of higher degree equations, and operations with exponents.

## ALGEBRA III/TRIGONOMETRY (NCAA)

Grades 11, 12
Prerequisite: Successful Completion of Algebra I, Academic Geometry, Academic Algebra II OR teacher/administrative approval

Algebra III/Trigonometry will provide a review and extension of the topics studied in Algebra II. Emphasis will be placed on a more in-depth study of Algebra concepts in addition to solving high degree equations and applications of the trigonometric functions. This is an ideal mathematics course to help prepare students for higher level mathematics including Academic Functions or college level math.

## ACADEMIC PRECALCULUS (NCAA)



Grades 11, 12
1.0 credit

Prerequisite: Successful Completion of Academic Geometry AND Academic Algebra II OR teacher/administrative approval

Academic Precalculus includes the study of functions that are circular, polynomial, logarithmic, and exponential. The focus on understanding the behavior of functions leads to an emphasis on using a graphing calculator. Students will also learn to use matrices and discover that the complex numbers are not too complex after all. To help ensure success in Functions, a student must successfully complete all outcomes for prerequisite courses.

## STATISTICS (NCAA)



Grades 11, 12
1.0 credit

Prerequisite: Successful Completion of Honors/Academic Algebra II OR College Algebra OR teacher/administrative approval.

Students who have completed Algebra II may take Statistics in $11^{\text {th }}$ or $12^{\text {th }}$ grade as a core math course. Statistical literacy is vital in today's society; numerical "information" confronts us daily. Today's students need to be able to determine whether claims based on numerical information are reasonable and accurate. Statistics focuses on the introduction of the study of statistics and probability. The course will include topics such as basic probability, odds, descriptive statistics (measures of central tendency, presentation of data (including graphs), normal distribution and measures of variability) and inferential statistics (confidence intervals, linear regression and hypothesis testing).

## COLLEGE ALGEBRA (NCAA)



Grades 11, 12
1.0 credit

Prerequisite: Successful completion of Algebra II or teacher/administration approval.
This course will be offered to $11^{\text {th }}$ or $12^{\text {th }}$ grade students who have completed Algebra II. College Algebra is geared for students who are not pursuing careers related to mathematics. This course will review and extend algebraic concepts for students who have already taken Algebra II. Course topics included (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher degree equations, operations with rational and irrational exponents, and concepts of logarithms. This course will also include basic trigonometric concepts and look at college algebra from the perspective of college math entrance exams.

## CORE PROGRAM

## STUDENTS TAKING ALGEBRA IA AND ALGEBRA IB

Students in the program will gain a solid foundation of algebraic and geometric concepts. Due to the implementation of the Keystone Algebra I Exam, students in the core level will take Algebra IA in grade 9 and Algebra IB and Algebra IB Enhancement in grade 10 to provide students with the necessary time needed to help better prepare them for the Algebra I Keystone Exam in grade 10. Typical students who take Algebra IA and Algebra IB will take Algebra II in grade 11 to reinforce and extend algebraic concepts and skills and will take Geometry in grade 12.

## ALGEBRA IA (. 50 credit for NCAA)



Grade 9
1.0 credit

Prerequisite: Successful Completion of $8^{\text {th }}$ Grade Essentials of Algebra
Get ready to meet the requirements for life in the 21st century by developing skills in algebra through applications from the first part of a multi-year sequence of Algebra I. This course covers the same topics as the first half of the Algebra I curriculum including the study of properties of rational numbers, ratio, proportion, the rectangular coordinate system, and solving first degree equations and inequalities. Making connections between equations, tables, and graphs of linear equations will be introduced in this course. By associating reallife applications of Algebra with classroom instruction, students are offered a unique way of looking at and learning concepts through the development of concepts, skills, and problem solving. Deficient skills will be emphasized and reinforced within the context of learning Algebra. Graphing calculators for making connections and developing concepts will be used as a teaching tool throughout the year.

## ALGEBRA IA Enhancement



Grade 10
.50 credit
Prerequisite: This fall, semester course is for students who failed their grade 9 math core course requirement. Successful completion of Algebra IA Enhancement will count as the required grade 9 core math course for Algebra IA for district graduation requirements.

Algebra IA Enhancement reviews and reteaches the content from Algebra IA and covers the same topics as the first half of the Algebra I curriculum including the study of properties of rational numbers, ratio, proportion, the rectangular coordinate system, and solving first degree equations and inequalities. Making connections between equations, tables, and graphs of linear equations will be introduced in this course. By associating reallife applications of Algebra with classroom instruction, students are offered a unique way of looking at and learning concepts through the development of concepts, skills, and problem solving. Deficient skills will be emphasized and reinforced within the context of learning Algebra. Graphing calculators for making connections and developing concepts will be used as a teaching tool throughout the year.


Algebra IB is the second course of the multi-year sequence for Algebra I. This course covers the same topics as the second half of the Algebra I curriculum while reinforcing the concepts from Algebra IA including linear and quadratic equations, linear inequalities, and translating and solving word problems using equations and inequalities. Making connections between equations, tables, and graphs of linear equations will be continued from Algebra IA along with the continued study of systems of equations and inequalities. Graphing calculators for making connections and developing concepts will be used as a teaching tool throughout the year. *Note: All students enrolled in this course are required to take the Keystone Exam.

## ALGEBRA IB ENHANCEMENT



Grade 10
Prerequisite: This course is to be taken along with Algebra IB OR with teacher/administrative approval
Algebra IB Enhancement is a course that prepares students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master mathematical concepts and study skills across content areas. Special emphasis is placed on the development of algebraic concepts, skills and techniques for use with variables, formulas, the real number system, linear equations, inequalities, the graphs of relations and functions, probability, and data analysis.

GEOMETRY (NCAA)


Grade 12
Successful completion of Algebra II and/or teacher/administrative approval.
Geometry will examine connections between geometry and algebra. Many experiences will be provided to deepen the understanding of shapes and the properties. The course will emphasize logical reasoning, spatial visualization skills, and the application to problem solving. Students will explore and make sense out of how two column deductive formal proofs are written. The interplay between the two strengthens students' abilities to formulate and analyze problems from both within and outside mathematics. Geometry will emphasize an abstract, formal approach to the study of geometry. The course includes topics such as properties of plane and solid figures, deductive methods of reasoning and use of logic, concepts of congruence, similarity, parallelism, perpendicularity, proportion, and rules of angle measurement in triangles.

## ALGEBRA II (NCAA)

Grade 11
Prerequisite: Successful Completion of Algebra IA/Algebra IB OR teacher/administrative approval
Algebra II enhances the depth of Algebra and is a continuation of Algebra I. The properties of real numbers will be extended. The course includes topics such as set theory, operations with rational and irrational expressions, factoring of rational expressions, in-depth study of linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, graphing of constant, linear, and quadratic equations, properties of higher degree equations, and operations with exponents. Graphing calculators will play an important role as students interpret graphs, explore properties, determine relationships between graphs and develop the different concepts in Algebra II.

## MATHEMATICS ELECTIVES

| Courses | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| SAT Preparation | 11 |  |
| *Introduction to Java <br> Programming | $10,11,12$ | Computer Science Fundamentals, Introduction to <br> Java or Introduction to Python |
| *C++ Programming | 11,12 | Introduction to Java and Advanced Java or Teacher <br> Recommendation |
| *Advanced Java Programming | $10,11,12$ | 11,12 |
| *AP Computer Science <br> Principles |  |  |
| *AP Computer Science A Java |  |  |

A student who successfully completes a course in the area of information technology during grades nine through twelve shall be permitted to apply up to one credit earned for successful completion of such course to satisfy the student's mathematics or science credit requirement for graduation, provided, that the governing body of the student's public high school shall have discretion to determine the graduation credit requirement to which the credit earned by the student shall be applied.
*Course will count as a math elective

SAT PREPARATION
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(Math and Reading)
Grade 11
The SAT Prep course is designed to help prepare students for the SAT test for math and reading. Students will take both SAT math for 45 days and SAT reading for 45 days for one semester. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students learn test-taking strategies specific to the exam. Students will work with instructional strategies and materials in both math and reading including online resources, direct and guided instruction in content area skills, samples with explanations, practice tests, and study resources. Resource materials will be available for students in school and at home.

## *INTRODUCTION TO JAVA PROGRAMMING

Grades 9, 10, 11, 12
This is the programming course a student should take before taking the C++ course. Students learn to write computer programs using the JAVA language. By the end of the course, students will learn the Java programming skills necessary to write computer programs that implement graphics (MS Paint, picture manipulation); games that incorporate logic (Connect 4, Sudoku, Hangman, puzzles); game show applications (Wheel of Fortune, Jeopardy); animation-base applications (Sonic, Mario, Asteroids); and real-world applications (tutorials to help people, simulations).

Grades 10, 11, 12
By the end of this course, students will be able to program average games using the $\mathrm{C}++$ language. This class moves at a faster pace than Intro to Java and utilizes and improves upon the logic skills learned in that course. By the end of this course, students will be able to write almost any program using the C++ language.
*ADVANCED JAVA PROGRAMMING


Grades 10, 11, 12
This course is a continuation from the end of Intro to Java. Students will learn more complex data structures to write the computer programs they desire. One dimensional, two dimensional arrays, and programmer defined objects will be emphasized.
*AP COMPUTER SCIENCE PRINCIPLES
Grades 11, 12
Prerequisite: Computer Science Fundamentals and Introduction to Java or Introduction to Python
AP Computer Science Principles is one of the newest AP courses from the College Board. This course introduces students to the foundational concepts of computer science and explores the impact computing and technology has on our society. With a unique focus on creative problem solving and real-world applications, the AP Computer Science Principles course gives students the opportunity to explore several important topics of computing using their own ideas and creativity, use the power of computing to create artifacts of personal value, and develop an interest in computer science that will foster further endeavors in the field.

## *AP COMPUTER SCIENCE A (JAVA)



Grades 11, 12
1.0 credit

Prerequisite: Introduction to Java and Advanced Java or teacher recommendation
Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science A provides students with the logical, mathematical, and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. These courses cover such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.

## MUSIC

In this age of scientific achievement and advanced study, an understanding of the aesthetic values of music is required to develop a well-rounded person.

The pressure of our modern society demands high academic standards and achievements. However, the arts cannot be neglected. Music is important to the social and mental well-being of the individual, not only as a diversion from everyday stress, but also as an artistic, and creative stimulus for the mind.

To support this concept, the high school music program has developed the philosophy to challenge the most musically talented students and to provide them a varied outlet for their talents both in the vocal and instrumental areas.

## SYMPHONIC BAND (EHS only)

Grades 9, 10, 11, 12
Prerequisite: Participation in the Junior High School Instrumental program or an audition and/or approval by High School Instrumental Teacher.

Symphonic Band is an ensemble of woodwind, brass and percussion that is open to all interested. The Symphonic Band will meet for 57 minutes per day for 180 days. The Symphonic Band will perform in three curricular concerts throughout the school year.

## WIND ENSEMBLE (EHS only) <br> 

Grades 9, 10, 11, 12
1.0 credit

Prerequisite: Participation in the Junior High School Instrumental program with an audition and approval by Junior High and High School Instrumental Teacher.

Wind Ensemble is a select group of woodwind, brass and percussion that performs a high level of music that will challenge the individual musician and prepare them for the professional environment beyond high school. The Wind Ensemble will meet for 57 minutes per day for 180 days. The Wind Ensemble will perform in three curricular concerts throughout the school year with the possibility of participating in concerts/adjudications off school campus. Placement in this ensemble is through an audition process.

Prerequisite: Participation in the Junior High Choir or an entry level choir
Concert Choir is an entry level offered to high school students to develop healthy vocal skills and musical knowledge through practice and performance of various types of vocal repertoire.. Rehearsals are scheduled five times a week during the school day for approximately 57 minutes per day for 180 days.

The Concert Choir will participate in two curricular concerts throughout the school year as well as any additional performance opportunities which may arise.

Concert Choir and Symphonic Band meet during the same class period. Rehearsal schedules are determined by the directors.

## COMBINED CONCERT CHOIR/SYMPHONIC BAND (EHS only)

Grades 9, 10, 11, 12
Refer to Concert Choir and Symphonic Band course descriptions.
This course section is for those students who will participate in both Concert Choir and Symphonic Band.

## DIVISI CHOIR (EHS only)



Grades 9, 10, 11, 12
1.0 credit

Prerequisite: Audition and pretest by Choral Director.
DivisiChoir is a select choir offered to high school students to develop healthy vocal skills and musical knowledge through practice and performance of various types of vocal repertoire.. Rehearsals are scheduled five times a week during the school day for 57 minutes per day for 180 days.

Divisi Choir will participate in two curricular concerts throughout the school year as well as any additional performance opportunities which may arise. The more qualified students are eligible to participate in competitive auditions for higher-level extracurricular ensembles such as show choir, banner singers, county chorus, and district chorus.

Wind Ensemble and Divisi Choir meet during the same class period. Rehearsal schedules are determined by the directors.

Divisi Choir is open to all students in grades nine through twelve, by audition and pretest to determine sufficient proficiency in singing and music reading skills. Students interested in joining should contact the chorus teacher. Auditions are held the previous spring during scheduling.

# COMBINED DIVISI CHOIR /WIND ENSEMBLE (EHS only) 

Grades 9, 10, 11, 12

Refer to Divisi Choir and Wind Ensemble course descriptions.
This course section is for those students who will participate in both Divisi Choir and Wind Ensemble.

The Concert Band, in keeping with the tradition of fine high school concert bands, presents a balanced study of performance literature at its highest level. This band demands the ultimate instrumental performances from its students. The Concert Band presents a mid-winter and spring concert and may attend band adjudication festivals in the spring. Coupled with these performances are carefully selected public appearances within and outside the community.

Concert Band and Concert Choir meet during the same class period. Rehearsal schedules are determined by the directors. Additional rehearsals for either full band or sections of the band are held after school or in the evening when necessary. Students are expected to take part in the instrumental lesson schedule when academics permit.

Concert Band is open to all students in grades nine through twelve who show sufficient proficiency on their chosen instruments. The more qualified students are eligible to participate in district and regional bands where competitive auditions are required. This course runs each day for 180 days.

## HONORS CONCERT BAND (WHS only)



Grades 10, 11, 12
Prerequisite: Participation in 9th, 10th, or 11th Grade Concert Band the previous year or an audition and/or approval by High School Instrumental teacher.

The Honors Concert Band is designed for students who consistently demonstrate high interest and achievement in Concert Band. The Honors Concert Band will rehearse during the same class period as Concert Band and will participate in all of the same performances. In addition to participating in all Concert Band performances, the Honors Concert Band students will participate in extra music activities such as PMEA District 10 Band auditions, collegiate Wind Band Celebrations, and other honors festivals.

As a member of the Honors Concert Band, students will be required to perform all twelve major scales from memorization at 120 beats per minute. Students will be required to learn one to two solos (standard repertoireex. District Band solos) on their primary instrument and audition for the PMEA District 10 Band in December.

Grades 9, 10, 11, 12
Prerequisite: Participation in the Junior High Choral program or audition and/or the approval of the High School Choir Director.

Concert Choir is a course offered to high school students to develop healthy vocal skills and musical knowledge through practice and performance of various types of vocal repertoire. Rehearsals are scheduled five times a week during the school day for 180 days.

The Concert Choir will participate in two curricular concerts throughout the school year as well as any additional performance opportunities which may arise. Also, students are eligible to participate in district, regional and all-state level choirs where competitive auditions are required.

Students interested in joining the Concert Choir should contact a member of the music faculty.

## COMBINED BAND/CHORUS (WHS only)

Grades 9, 10, 11, 12
1.0 credit

Refer to Concert Band/Choir Descriptions.

## VOICE I (EHS only)



Grades 9, 10, 11, 12

Voice I is designed for students who have minimal to no vocal experience and would like to learn the basics of singing as a soloist. This course will focus on basic vocal techniques in private and small group voice lessons.. The goal of this course is to educate students on proper vocal technique and to provide students with knowledge of proper vocal use.

## VOICE II (EHS only)



Grades 10, 11, 12
.50 credit
Prerequisite: Voice I
Voice II is designed for students who have had at least one year of vocal experience and would like to learn the advanced vocal technique. The course will focus on advanced vocal skills through private/group lessons. The goal of this course is to educate students on proper vocal technique and to prepare students for the advancement in the vocal arts, as well as prepare students for post-secondary performance and career opportunities.

Piano Skills I is for those students who show an interest in studying basic piano playing techniques through music reading and music theory. Students will also study famous composers throughout music history and perform their favorite works.

## PIANO SKILLS II



Grades 10, 11, 12
.50 credit
Prerequisite: Piano Skills I
Piano Skills II is for those students who show a continued interest in studying basic piano playing techniques through music reading and music theory. Students will also study famous composers throughout music history and perform their favorite works.

## MUSIC THEORY I



Grades 9, 10, 11, 12
Prerequisite: Completion of one year of Concert Choir or Concert Band in Junior High School or High School, or one semester of Piano Skills.

Students who intend to pursue a music career will benefit from Music Theory I. Students will study the theoretic mechanics of music including major and minor scales, music notation, ear training, melodic and rhythmic notation and the fundamentals of triadic harmony. Students will also be required to develop singing skills and demonstrate basic conducting techniques. Music history will also be taught focusing on the development of music from the Middle Ages to Twentieth Century composition.

## AP MUSIC THEORY



Grades 10, 11, 12
1.0 credit

Prerequisite: Teacher recommendation, Music Theory I
The goal of this course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. This course meets National Standards allowing students to earn college credit and/or advancement while still in high school.

## VIDEO AND MUSIC PRODUCTION (EHS only)

Grades 11, 12

This course is designed to give students an exciting and rewarding foundational experience in the field of digital media. Through a hands-on approach, students will learn the basics of single-camera video production, lighting techniques, interview skills, as well as sound engineering and musical production for video purposes. In addition, students will get a glimpse of behind the scenes of live productions such as musical performances where lighting and audio are key ingredients. Students will be working with the most up to date video editing and music editing software in the industry. This course provides an experience in both technical and creative aspects and will be taught by teachers from the Music department and the Business Marketing Communication and Audio/Visual Technology departments.

## MODERN BAND (EHS only)



Grades 10, 11, 12
1.0 credit

Prerequisite: Audition and pretest by approval of the course instructor. Proficient in performing one of the following: Electric guitar, electric bass, drums, keyboard, and/or voice

Modern Band provides a creative outlet for students to learn and perform commercial music genres on electric guitar, electric bass, drums, keyboard or voice. This is accomplished through listening, academic exploration, practice and performance of African and Western European influences in the formation of blues, jazz, rock and other related musical styles. Students study these styles and artists, as well as many recording and performance techniques. Students analyze and perform a number of works on their respective instruments. This is elective is designed to meet the needs of students in grades 10-12 who are interested in understanding and performing blues and rock music and who already play electric guitar, electric bass, drums, or keyboard.

INTRO TO THEATER ARTS (EHS only)


Grades 9, 10, 11, 12
Intro to Theater Arts is an introductory drama course which includes a basic history of the theater, class reading and interpretation of monologues and dialogues, the development of original scenes and improvisational skills, the reading and discussion of one act plays and musicals, and a variety of projects developed from the literature of the theater. Students will gain experience in basic dramatic and musical techniques and will develop their abilities to use both vocal and body language in interpreting dramatic roles convincingly. Basics of stage management will foster knowledge of how the backstage crew supports performances. Students will benefit from viewing and critiquing local college and professional productions. The literature of the theater will come alive through the reader's theater activities.

# ADVANCED THEATER ARTS (EHS Only) 

Grades 9, 10, 11, 12
Prerequisite: Intro to Theater Arts
Advanced Theatre Arts is an advanced drama course which builds upon the skills learned in Intro to Theater Arts. Students will further develop original scenes and improvisational skills to create a variety of advanced projects. Advanced skills in stage management will provide hands-on experience of working as a stage crew. Students will gain experience in advanced dramatic techniques and will design a theatrical presentation using the skills gained through Intro to Theater and this course.

## SCIENCE

The science program for grades nine through twelve is presented as a process of inquiry, using scientific approaches for solving problems. The program is designed to help young people become aware of the forces shaping the environment so they may think and act intelligently in a rapidly changing scientific world. Major consideration is given to the process of thinking, concept, knowledge of the sciences, and laboratory experiences.

KEYSTONE BIOLOGY TUTORIAL

Grades 10, 11
Prerequisite: Students are selected based upon not demonstrating proficiency on the Keystone exam and/or Biology Course.

The Keystone Biology Tutorial is an alternative way for students to graduate if he/she does not demonstrate proficiency on the Keystone Exam. The Keystone Biology Tutorial course will provide support to students in demonstrating their ability to meet or exceed the academic standards at a proficient or advanced level. Students may also be required to retake the Keystone Biology Exam. Successful completion of the Keystone Biology Tutorial course may fulfill the required Biology course credit. Proficiency on the Keystone Biology exam retest or successful completion of the Keystone Biology course will meet the local graduation requirement.

## HONORS PROGRAM

## HONORS BIOLOGY (NCAA)



Grade 9
Prerequisite: Teacher Recommendation and/or a qualifying score on a science placement test
Honors Biology covers biological systems in more detail. Topics covered include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution, and ecology. Concepts taught in Honors Biology are more in depth and stress independent preparation. *Note: All students enrolled in this course are required to take the Keystone Exam.

## HONORS CHEMISTRY (NCAA)


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Grade 10
1.0 credit

Prerequisite: Biology, Recommendation and/or a qualifying score on a science placement test

Honors Chemistry covers chemical properties and interactions in more detail. Topics will include measurement and conversions, matter, atomic structure, electron notations, nuclear chemistry, periodic table properties, chemical bonding, nomenclature, chemical reactions, chemical quantities, stoichiometry, solution chemistry, acids/bases, and gas properties and laws. Advanced topics include VSERP theory, net ionics, oxidation/reduction reactions, and organic chemistry.

## HONORS EARTH SCIENCE (NCAA)



Grade 11
Prerequisite: General Physical Science or Chemistry, and recommendation and/or qualifying score on science placement test

Honors Earth Science offers insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, this course explores oceanography, geology, astronomy, meteorology, and geography. The course also prepares students for advanced studies in geology, meteorology, oceanography, and astronomy courses, and gives them more sophisticated experiences in implementing scientific methods. Additional honors assignments include debates, research papers, extended collaborative laboratories and virtual laboratories.

## HONORS PHYSICS (NCAA)



Grade 11
Prerequisite: Biology, Honors Chemistry, Algebra I, Geometry, Algebra II, Functions (may be taken concurrently)

Honors Physics provides instruction in laws of conservation, kinetics; wave and particle phenomena; electromagnetic fields. Honors Physics requires students to apply higher levels of mathematics to fundamental physical phenomena. A research paper or project utilizing methodologies will be required.

## ADVANCED PLACEMENT (AP) SCIENCE COURSES (ELECTIVE OFFERINGS)

## AP BIOLOGY (NCAA)



Prerequisite: Honors Biology with a minimum final grade of $83 \%$, Biology with a minimum final grade of $93 \%$ or successful completion of an AP course. Students taking AP Biology should have completed or should be concurrently taking Chemistry OR have teacher/ administrative approval to take the course.

Adhering to the curricula required by the College Board and designed to parallel college level introductory biology courses, AP Biology emphasizes science practices and the synthesis of information into major biological concepts. This course covers the 4 Big Ideas: evolution, utilization of free energy to maintain homeostasis, the storage/retrieval/transmission/response to biological information, and the interactions between systems. AP Biology includes college-level, inquiry-based laboratory experiments.

## AP CHEMISTRY (NCAA)



Grades 11, 12
1.0 credit

Prerequisite: Honors Chemistry with a minimum final grade of $83 \%$, Chemistry with a minimum final grade of $93 \%$ or successful completion of an AP course

Following the curricula recommended by the College Board, AP Chemistry follows high school chemistry and second-year algebra. This course covers the 6 Big Ideas: structure of matter, bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics, and chemical equilibrium. AP Chemistry includes college-level, inquiry-based laboratory experiments.

## AP PHYSICS (NCAA)



Designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors, this AP Physics course will primarily focus on mechanics.

## ACADEMIC PROGRAM

## BIOLOGY (NCAA)



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Grade 9
1.0 credit

Biology is designed to provide information regarding the fundamental concepts of life and life processes. Topics covered include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution, and ecology *Note: All students enrolled in this course are required to take the Keystone Exam.

## CHEMISTRY (NCAA)



Grade 10
Prerequisite: Biology
Chemistry involves studying the composition, properties, and reactions of matter. This course explores measurement and conversions, matter, atomic structure, electron notations, nuclear chemistry, periodic table properties, chemical bonding, nomenclature, chemical reactions, chemical quantities, stoichiometry, solution chemistry, acids/bases, and gas properties and laws.

## EARTH SCIENCE (NCAA)


1.0 credit

Grade 11
1.0 credit

Prerequisite: General Physical Science or Chemistry (Earth Science may be taken in lieu of Physics)
Earth Science offers insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, this course explores oceanography, geology, astronomy, meteorology, and geography.

## PHYSICS (NCAA)



Grades 11, 12
1.0 credit

Prerequisite: Chemistry, Geometry, Algebra II (may be enrolled concurrently) (Physics should be taken by any student interested in a science-related career or college path)

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, magnetic and electric phenomena.

## CORE PROGRAM

## CONTEMPORARY INTEGRATED SCIENCE (NCAA)

Grade 9

1.0 credit

Contemporary Integrated Science is designed for students who will benefit from instruction to help better prepare them for future Science courses. The recommendation for this course will be based on multiple data including PVAAS, PSSA scores, grades, and teacher recommendations.

Contemporary Integrated Science covers content in Earth Science, Physical Science (Chemistry and Physics), and Biology to help prepare students for their future Science courses including Biology. There will be an emphasis on life science (Biology) principles to help better prepare students for Biology and the Keystone Exam in grade 10. Vocabulary development, applications, hands-on activities, and study skills will be an integral part of the curriculum. Possible themes in the course related to Earth Science, Physical Science, and Biology may include systems, models, energy, patterns, change and constancy. The course will use appropriate aspects from each specialty to investigate applications.

BIOLOGY (NCAA)


Grade 10
1.0 credit

Biology is designed to provide information regarding the fundamental concepts of life and life processes. Topics covered include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution, and ecology *Note: All students enrolled in this course are required to take the Keystone Exam.

GENERAL PHYSICAL SCIENCE (NCAA)


Grade 11
1.0 credit

Prerequisite: Biology

General Physical Science involves the study of basic chemistry and physics. This course will serve as an introductory survey course and will include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

## EARTH SCIENCE (NCAA)



Grade 11
Perquisite: General Physical Science or Chemistry
Earth Science offers insight into the environment on earth and earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, this course explores oceanography, geology, astronomy, meteorology, and geography.

## SCIENCE ELECTIVES

| Course | Grade(s) | Prerequisites |
| :---: | :---: | :---: |
| Astronomy I | 9, 10, 11, 12 | No Prerequisite |
| Astronomy II | 9, 10, 11, 12 | Astronomy I |
| Meteorology I | 9, 10, 11, 12 | No Prerequisite |
| Meteorology II | 9, 10, 11, 12 | Meteorology I |
| Forensic Science I | $9,10,11,12$ | No Prerequisite |
| Forensic Science II | 9, 10, 11, 12 | Forensic Science I |
| Human Anatomy | 10, 11, 12 | Biology |
| Zoology | 10, 11, 12 | Biology |
| Introduction to STEM | 9, 10, 11, 12 | No prerequisite |
| Introduction to Engineering Design I | 9, 10, 11, 12 | See Prerequisites in course description |
| Introduction to Engineering Design II | 9, 10, 11, 12 | Successful completion of Introduction to Engineering I |
| Principles of Engineering I | 10, 11, 12 | Successful completion of Introduction to Engineering Design I and II OR Successful Completion of Academic Algebra I or Algebra IB AND Concurrently taking Geometry. Strong math applications and background are necessary for this |
| Principles of Engineering II | 10, 11, 12 | Successful completion of Principles of Engineering I |
| Aviation STEM | $9,10,11,12$ | See Prerequisites in course description |
| AP Biology | 10, 11, 12 | See Prerequisites in course description |
| AP Chemistry | 11, 12 | See Prerequisites in course description |
| AP Physics | 12 | See Prerequisites in course |

Astronomy I explores the connection to our solar system, constellations, and outer space.

# ASTRONOMY II 

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Astronomy I
Astronomy II will continue to explore the connection to our solar system, constellations, and outer space

## METEOROLOGY I

Grades 9, 10, 11, 12
.50 credit

Meteorology examines the properties of the earth's atmosphere. Topics include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.

## METEOROLOGY II

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Meteorology I
Meteorology II will continue to examine the properties of the earth's atmosphere. Topics include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.

## HUMAN ANATOMY (NCAA)

Grades 10, 11, 12
1.0 credit

Prerequisite: Biology

This general science course will introduce students to in-depth study of the human body and biological system. Students will study such topics as anatomical terminology, cells, tissues and explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

## FORENSIC SCIENCE I (STEM)



Grades 9, 10, 11, 12

This general science course will introduce students to many topics of criminology within the field of forensic science. Students will be exposed to laboratory techniques; the significance of physical evidence; admissibility in a court of law; encourage electronic searching methods; develop writing and speaking skills; encourage inquiry, cooperation and authentic assessment; and demonstrate experimental limitations of accuracy and observation.

Grades 9, 10, 11, 12

This general science course will provide students with an in-depth look into the many topics of criminology within the field of forensic science. Students will be exposed to laboratory techniques; the significance of physical evidence; admissibility in a court of law; encourage electronic searching methods; develop writing and speaking skills; encourage inquiry, cooperation and authentic assessment; and demonstrate experimental limitations of accuracy and observation.

## ZOOLOGY (NCAA)

Grades 10, 11, 12
1.0 credit

Prerequisite: Biology

This general science course will provide students with an understanding of animals, the niche they occupy in the environment or habitat, life cycles, and evolutionary relationships to other organisms. This course should also help students develop an awareness and understanding of the biotic communities. In addition, students will study animal behavior and compare the internal and external anatomy of invertebrates and vertebrates. This course is highly recommended for students wanting to pursue a career as a veterinarian or in the animal sciences.

## INTRODUCTION TO STEM (STEM)



Grades 9, 10, 11, 12

Introduction to STEM is a course for students to explore science, technology, engineering and math all in one curriculum. This course offers an innovative approach to learning in which students use problem solving skills to tackle hands-on learning activities. Skills in this course will improve critical thinking and encourage confidence and enthusiasm for STEM.

## INTRODUCTION TO ENGINEERING DESIGN I (STEM)



Grades 9, 10, 11, 12
.50 credit
Prerequisite: Academic Algebra I or Algebra I B completion

Students will dig deep in engineering design process, applying math, science, and engineering standards to hands-on projects in the first part of this two series class using Project Lead the Way curriculum. Students work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and use an engineering notebook to document their work.

# INTRODUCTION TO ENGINEERING DESIGN II (STEM) 

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Successful completion of Introduction to Engineering Design I
As the second part of the Introduction to Engineering Design I course, Introduction to Engineering Design II will complete the Project Lead the Way requirements for the Introduction to Engineering Design course. Students will dig deeper into the engineering design process, applying math, science, and engineering standards to hands-on projects. Students work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and use an engineering notebook to document their work. Students may take the end of course Project Lead the Way Exam at the end of this course.

## PRINCIPLES OF ENGINEERING I (STEM)



Grades 10, 11, 12
Prerequisite: Successful Completion of Introduction to Engineering Design I and II OR Successful Completion of Academic Algebra I or Algebra IB AND Concurrently taking Geometry. Strong mathematical applications and background are necessary for this course.
Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Coding and robotics are integrated into the Principles of Engineering I course.

## PRINCIPLES OF ENGINEERING II (STEM)



## Grades 10, 11, 12

Prerequisite: Successful Completion of Principles of Engineering Design I
As the second part of the Principles of Engineering I course, Principles of Engineering II will complete the Project Lead the Way requirements for the Principles of Engineering Design course. Students will dig deeper into engaging problems that challenge them to explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Coding and robotics are integrated into the Principles of Engineering II course. Students may take the end of course Project Lead the Way Exam at the end of this course.

(4)

Grades 9, 10, 11, 12
.50 credit
Prerequisite: Academic Algebra I or Algebra IB completion
The Aviation STEM course will provide the foundation for advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will look at the problem-solving practices and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will also gain historical perspective, starting from the earliest flying machines and leading to the wide variety of modern aircraft and the integral role they play in making today's world work.

## SOCIAL STUDIES

The Social Studies program is designed to foster global citizenship. The scope of the program is such that every student is given the opportunity to investigate and evaluate the cultural, political, social, and economic aspects of many societies. The development of research, critical and analytical thinking, writing, and communication skills is an integral component of the social studies program.

## HONORS PROGRAM

## HONORS CIVICS (NCAA)

Grade 10
Prerequisite: Teacher/Administrator Recommendation and/or a qualifying score on a Social Studies placement test.

The Honors Civics course is designed for those students who consistently demonstrate high interest and achievement in Social Studies. This course will examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. Special emphasis is given to developing student skills in critical and analytical thinking, reading of primary and secondary sources, the research process, and research writing.

## HONORS MODERN U.S. HISTORY (NCAA)

Grade 11
Prerequisite: Teacher/Administrator Recommendation and/or a qualifying score on a Social Studies placement test.

Honors Modern U.S. History is designed for those students who consistently demonstrate high interest and achievement in Social Studies. This course will examine the history of the United States from the Civil War or Reconstruction era through the present time and will include a historical review of political, military, scientific, and social developments. Special emphasis will be given to developing student skills in critical and analytical thinking, reading of primary and secondary sources, the research process, and research writing. Coursework may include a research paper/project and a schedule of outside reading.

## HONORS WORLD HISTORY (NCAA)

Grade 12
Prerequisite: Teacher/Administrator Recommendation and/or a qualifying score on a Social Studies placement test.

Honors World History is designed for those students who consistently demonstrate high interest and achievement in Social Studies. This course will provide an overview of the history of human society in the past few centuries from the Middle Ages to the present. Students will explore political, economic, social, religious, military, scientific, and cultural developments. Special emphasis will be given to developing student skills in critical and analytical thinking, reading of primary and secondary sources, the research process, and research writing. Coursework may include a research paper/project and a schedule of outside reading.

# ADVANCED PLACEMENT (AP) SOCIAL STUDIES COURSES (ELECTIVE OFFERINGS) 

## AP HUMAN GEOGRAPHY (NCAA)

Grades 9, 10, 11, 12
1.0 credit

Prerequisite: Teacher, guidance and/or administrative recommendation for $9^{\text {th }}$ grade students. Honors ELA with a final average grade of $83 \%$ or higher, or Academic ELA with a final average grade of $93 \%$ or higher, or successful completion of any AP course.

Following the College Board's suggested curriculum designed to parallel college-level Human Geography courses, AP Human Geography introduces students to the systematic study of patterns and processes that have shaped the ways in which humans understand, use, and alter the earth's surface. Students use spatial concepts and landscape analysis to examine human social organization and its environmental consequences and also learn about the methods and tools geographers use in their science and practice.

## *This course is a prerequisite to AP Seminar for students in grade 10.

## AP UNITED STATES HISTORY (NCAA)

Grades 10, 11, 12
1.0 credit

Prerequisite: Honors Civics with a final average grade of $83 \%$ or higher, or Civics with a final average grade of $93 \%$ or higher, or successful completion of any AP course. This course can be taken in addition to or in place of Modern U.S. History.

Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History provides students with the analytical skills and factual knowledge necessary to address critical problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past.

## AP EUROPEAN HISTORY (NCAA)

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Grades 10, 11, 12
1.0 credit

Prerequisite: Honors Modern US History with a final average grade of $83 \%$ or higher, or Academic Modern US History with a final average grade of $93 \%$, or successful completion of any AP course. This course can be taken in addition to or in place of Honors World History.

Following the College Board's suggested curriculum designed to parallel college-level European History courses, AP European History examines European civilization from the High Renaissance period to the recent past and also exposes students to the factual narrative. In addition, this course helps students to develop an understanding of some of the principal themes in Modern European history and the abilities to analyze historical evidence and to express that understanding and analysis in writing.

AP WORLD HISTORY (NCAA)
Grades 10, 11, 12
1.0 credit

Prerequisite: Honors Modern US History with a final average grade of $83 \%$ or higher, or Academic Modern US History with a final grade 93\% or higher, or successful completion of any AP course. This course can be taken in addition to or in place of Honors World History.

Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History examines world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contracts and how different human societies have interacted. This course highlights the nature of change in an international context and explores their causes and continuity.

## AP PSYCHOLOGY (NCAA)

Grades 10, 11, 12
1.0 credit

Prerequisite: Honors ELA with a final average grade of $83 \%$ or higher, or Academic ELA with a final average grade of $93 \%$ or higher, or successful completion of any AP course.

Following the College Board's suggested curriculum designed to parallel a college-level psychology course, AP Psychology introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals, exposes students to each major subfield within psychology, and enable students to examine the methods that psychologists use in their science and practice.

## ACADEMIC PROGRAM

## CIVICS (NCAA)

Grade 10

The Civics course will examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system.

## MODERN U.S. HISTORY (NCAA)

## Grade 11

Modern U.S. History will examine the history of the United States from the Civil War or Reconstruction era through the present time. This course will include a historical review of political, military, scientific, and social developments.

## ACADEMIC WORLD HISTORY (NCAA)

Grade 12
World History will provide an overview of the history of human society in the past few centuries from the Renaissance period to the present. Students will explore political, economic, social, religious, military, scientific, and cultural developments.

WORLD HISTORY (NCAA)

SOCIAL STUDIES ELECTIVES

| Courses | Grade(s) | Prerequisites |
| :--- | :--- | :--- |
| Legal Education | $10,11,12$ | No Prerequisite |
| Psychology | $9,10,11,12$ | No Prerequisite |
| Philosophy | $9,10,11,12$ | No Prerequisite |
| Sociology | $10,11,12$ | No Prerequisite |
| Sociology/Peer Support | 12 | See course description |
| AP Human Geography | $9,10,11,12$ | See course description |
| AP United States History | $10,11,12$ | See course description |
| AP European History | $10,11,12$ | See course description |
| AP World History | $10,11,12$ | No Prerequisite |
| AP Psychology | $10,11,12$ | No prerequisite |
| History and the Media | $9,10,11,12$ | No Prerequisite |
| History Through Sporting and <br> Cultural Events | $9,10,11,12$ | $9,10,11,12$ |
| Civil Rights | $9,10,11,12$ | Norerequisite |
| Military History |  |  |

## LEGAL EDUCATION (NCAA)

Grades 10, 11, 12
1.0 credit

Legal Education will examine the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. The history and foundation of U.S. Law (the Constitution, statutes, and precedents) will also be examined.

## PSYCHOLOGY (NCAA)

Grades 9, 10, 11, 12
1.0 credit

Psychology introduces students to the study of individual human behavior. The course content will include (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

Philosophy will introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content will include examination of the major philosophers and their writings.

## SOCIOLOGY (NCAA)

Grades 10, 11, 12
Sociology will introduce students to the study of human behavior in society. Students in this course will gain an overview of sociology, including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

## SOCIOLOGY/PEER SUPPORT <br> 

Grade 12
1.0 credit

Sociology/Peer Support focuses on the major components of Sociology listed above as well as an ongoing training component for the Peer Support Volunteer Program. There is a screening process that must be completed for the Peer Support Volunteer Program.


Grades 9, 10, 11, 12
.50 credit
History and the Media focuses on the review of major historical events as presented in various forms of media (newspapers, periodicals, opinion papers, news clips, and films). Integrated writing skills will focus on comparing and contrasting one author's presentation of events with that of another. Additionally, several forms of media content will be analyzed to determine how the media structure contributed to the development of the ideas or facts presented, with students writing arguments to support their analysis.

## HISTORY THROUGH SPORTING AND CULTURAL EVENTS



Grades 9, 10, 11, 12
History through Sporting and Cultural Events will use major sporting and cultural events to teach history throughout the world. Events start in and around Ancient Athens and progress through the ages to today with Russia, who might not be able to send athletes to the 2020 Olympics. How sports were formed and how sports are played are not topics covered. Sporting and cultural events will be taught pertaining to their relevance to major historical events.

Civil Rights focuses on examining the various political and social changes that occurred as individuals and groups raised civil rights issues and challenged the status quo throughout US history. Integrated writing activities will include students conducting a short research project to synthesize multiple sources on the subject and to demonstrate comprehension of the topic.

## MILITARY HISTORY

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Grades 9, 10, 11, 12
Military History will provide students the opportunity to further examine military- related topics discussed in U.S. History. It will also provide a more robust historical context for understanding modern conflicts. Students will analyze the various accounts of a subject told in various mediums, determining details emphasized in each account.

The World Language Department provides a program that strives to prepare students for responsible and intelligent participation in our world. Knowledge of other languages and other cultures is an essential part of understanding others and living peacefully with them.
Three modern languages, French, Spanish, and German are offered by the World Language Department. The descriptions follow:

FRENCH I ~ SPANISH I ~ GERMAN I (NCAA)


Grades 9, 10, 11, 12
1.0 credit

Level I classes will be introduced to basic vocabulary needed to communicate with native speakers. All information taught deals with the real world and covers topics such as family, friends, school, and free time activities. Students begin to compare cultures and examine ways in which customs in the United States differ from those of other countries.

FRENCH II ~ SPANISH II ~ GERMAN II (NCAA)


Grades 9, 10, 11, 12
1.0 credit

Prerequisites: French I, Spanish I, German I
Level II students increase and improve skills in the four major areas of language: listening, speaking, reading and writing. Communication in the foreign language is stressed. As students continue to study, they become more aware of the structure of the target world language. Students continue to compare cultures and examine ways in which customs in the United States differ from those of other countries.

FRENCH III ~ SPANISH III ~ GERMAN III (NCAA)


Grades 9, 10, 11, 12
1.0 credit

Prerequisites: French II, Spanish II, German II
Level III - As students continue learning the target language, they are exposed to greater communication in the areas of reading and writing. Reading short stories further opens doors for the exploration of a different culture. Students strive to perfect their use of grammar and to enhance their existing world language vocabulary.

## HONORS FRENCH IV~ HONORS SPANISH IV~HONORS GERMAN IV (NCAA)



Grades 10, 11, 12
1.0 credit

Prerequisites: French III, Spanish III, German III, teacher recommendation
In Level IV, students will continue to develop their foreign language competencies in the areas of listening, speaking, reading and writing. More advanced grammatical structures are analyzed and covered through the use of sample AP exam excerpts and advanced grammar textbooks in an effort to help students prepare for the rigors of the AP exam. Essay composition, oral conversations and reading authentic pieces of literature and mixed media are also major components of the course where the target language is used almost exclusively. This course introduces aspects of the AP exam, including the six curricular themes.

Students will continue to work towards advanced proficiency in the target language. Students are expected to: engage in spoken and written interpersonal communication; synthesize information from a variety of authentic audio, visual, audiovisual, written and print resources; plan, produce, and present spoken and written presentational communications. The course is structured around six themes: beauty and aesthetics, contemporary life, families and communities, global challenges, personal and public identities and science and technology. Materials covered will depend on the interests and proficiency of the students in the class. This course prepares students to take the Advanced Placement Exam.

## ELECTIVE WORLD LANGUAGE COURSES

## SPANISH CULTURE



Grades 9, 10, 11, 12
This course offers a series of cultural lessons in which students take imaginary trips to actual Spanish- speaking countries, learning and practicing some target language skills while they explore each country's culture and geography and celebrate various holidays and customs.


Grades 9, 10, 11, 12
This course offers a series of cultural lessons in which students take imaginary trips to actual French- speaking countries, learning and practicing some target language skills while they explore each country's culture and geography and celebrate various holidays and customs.


Grades 9, 10, 11, 12
This course offers a series of cultural lessons in which students take imaginary trips to actual German- speaking countries, learning and practicing some target language skills while they explore each country's culture and geography and celebrate various holidays and customs.

Grades 9, 10, 11, 12
In this course, novice students will focus on learning comprehension and conversational skills. Spoken Spanish will provide comprehension practice using skits, videos music, songs and other audio files. Students will hear and use simple authentic language structures to learn how to communicate with native language speakers.

## CONVERSATIONAL FRENCH

Grades 9, 10, 11, 12
In this course, novice students will focus on learning comprehension and conversational skills. Spoken French will provide comprehension practice using skits, videos, music, songs and other audio files. Students will hear and use simple authentic language structures to learn how to communicate with native language speakers.

## CONVERSATIONAL GERMAN

Grades 9, 10, 11, 12

In this course, novice students will focus on learning comprehension and conversational skills. Spoken German will provide comprehension practice using skits, videos, music, songs and other audio files. Students will hear and use simple authentic language structures to learn how to communicate with native language speakers.


## Program Guide <br> 2023-2024

# The Monroe and Career Technical Institute serves the East Stroudsburg, Pleasant Valley, 

 Pocono Mountain, and Stroudsburg School Districts
## See your Guidance Counselor

## To inquire about enrolling at MCTI

The mission of the Monroe County Career \& Technical Institute (MCTI) is to provide "Professional excellence in career and technical training today for a successful tomorrow." We provide this training and education through a set of courses that we believe prepares students both academically and technically for a career or to pursue postsecondary education.

MCTI offers students 20 Program of Study (POS) and 3 Career Tech Programs. These programs are Pennsylvania Department of Education (PDE) approved programs that articulate the secondary career and technical education to a postsecondary degree, diploma, or certificate programs. These 23 programs align the secondary courses to a postsecondary program to complete a degree or certificate.

## PROGRAMS OF STUDY

"Program of Study" is a Pennsylvania Department of Education approved statewide program that:

- Incorporate and align secondary and postsecondary education
- Include academic and CTE content in a coordinated, non-duplicative progression of courses
- Includes the opportunity for secondary students to acquire postsecondary credits
- Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate of baccalaureate degree
- Identify and address current or emerging occupational opportunities
- Build on career clusters, career pathways, and career academies
- State develops in consultation with local Occupational Advisory Committees (OAC) and standards

How SOAR high school programs are accepted at postsecondary schools:

CollegeTransfer.net - Transfer Center
Aspire | Assess | Articulate


Go to CollegeTransfer.net or scan this QR Code with smart phone to see how SOAR programs are
accepted at higher education institutions.


## CAREER TECH

Career Tech programs combine at least two years of high school education with two years of postsecondary education to prepare students for technical careers in areas such as engineering technology, health and human services, and business/information technology. These articulated programs combine a common core of higher academics in math, science, and communications with a specific field of technical preparation. Career Tech is a college prep program that leads to an associate degree, two-year certificate, or apprenticeship. Career Tech students will be technically and academically prepared to join the workforce or continue their education towards a baccalaureate degree.

## Career \& Technical Student Organizations

Monroe Career \& Technical Institute offers several co-curricular activities through our Career \& Technical Student Organizations. Some organizations are supplemental to the career and technical programs.

## American Welding Society - AWS

The American Welding Society (AWS) was formed in 1919 to advance the science, technology and application of welding. Participation in a student chapter can provide valuable experience for career and personal development for members. AWS is recognized as the leading technical organization in the United States devoted to the advancement and interest of welding, joining and cutting processes. The organization includes welders, inspectors, and technicians of all levels as well as thousands of students who will become the workforce of the future.

## DECA - An Association of Marketing Students

DECA enhances marketing, management and entrepreneurship education. Students develop skills and competencies for careers, build self-esteem, experience leadership and practice community service. DECA promotes the partnership of education and business. DECA promotes leadership opportunities, competitive events and achievement/recognition activities on the local, state and national levels. Students enrolled in the Hotel, Resort \& Tourism and Marketing Programs are eligible to join DECA.

## National FFA Organization (Agricultural Education)

FFA is a co-curricular student organization which is an integral part of agriculture education. FFA enhances the education of students preparing or advancing their careers in production agriculture, products processing, agribusiness, renewable natural resources, agricultural mechanics, horticulture and environmental occupations. FFA promotes leadership opportunities, competitive events and achievement/recognition activities on local, state and national levels. Students in both the Floriculture and Horticulture Programs participate in FFA.

## Health Occupations Students of America - HOSA

HOSA is a national student organization that provides a unique program of leadership development, motivation and recognition exclusively for secondary, post-secondary, collegiate and adult students enrolled in health occupations education course or instructional programs. HOSA is an integral part of approved health occupation programs. HOSA promotes leadership opportunities, competitive events and achievement/recognition activities on local, state and national levels. Health Occupation students join HOSA.

## NAHB - National Association of Home Builders

NAHB is an association whose mission is to enhance the climate for housing and the building industry. The student chapter of NAHB works to provide activities for students to develop professionalism in the construction trades and to introduce students to the construction business. NAHB strives to create an environment in which: All American have access to the housing of their choice and the opportunity to realize the American dream of homeownership. Builders have the freedom to operate as entrepreneurs in an open and competitive environment. Housing and those who provide it are recognized as the strength of the nation. The Pocono Builders Association is the sponsor of MCTI NAHB student ${ }_{12}$ Oganization.

## National Technical Honor Society - NTHS

NTHS is a non-profit, honor organization for students enrolled in occupational, career and technical programs. The purpose of NTHS is to promote service, leadership, honesty, career development, and skilled workmanship, and to reward student achievement. The NTHS is the benchmark for excellence in workforce education, encouraging students to give their BEST. It also helps students build workplace values that are demanded in today's quality-driven business and industry. Website: www.nths.org

## SkillsUSA

SkillsUSA is a co-curricula student organization which is an integral part of trade, industrial, and technical education. SkillsUSA enhances the education of students by preparing or advancing their careers in the service, manufacturing, technical, trade and industrial occupations. SkillsUSA promotes leadership opportunities, competitive events and achievement/recognition activities at the local, district, state and national levels. All career and technical students can participate in SkillsUSA. Website: www.Skillsusa.org

## Student Government/Interact

Student Government provides opportunities for active participation in the organization and management of school affairs; to further interest in all school activities; to teach and develop leadership qualities through domestic practices and to cooperate in promoting career and technical education in general, as well as the general welfare of the school.
Interact: A Rotary-sponsored service club for young people in their secondary-school ages, gives an opportunity for students to participate in fun and meaningful service projects. Interact clubs perform at least two projects a year, with one serving the community and the other furthering international understanding. Along the way, Interactors (Interact Club Members) develop their leadership skills and initiative while meeting new friends. Through the service activities, Interactors learn the importance of:
$>$ Developing leadership skills and personal integrity.
$>$ Demonstrating helpfulness and respect for others.
$>$ Understanding the value of individual responsibility and hard work.
$>$ Advancing international understanding and goodwill.
Membership in the Student Government/Interact requirements:
$>$ Each program session selects one representative and an alternate.
$>$ Each representative and alternate is a bona fide member of a CTSO.
$>$ Each representative (or alternate) attends meetings as called by the advisor.


#### Abstract

AEVIDUM Aevidum is a non-profit organization that empowers youth to shatter the silence surrounding depression, suicide, and other issues facing teens. The word Aevidum, which means "I've got your back," was created by students after a classmate died by suicide. Aevidum inspires schools and communities to adopt cultures of care and advocacy, encouraging all members to have their friends' backs. At Aevidum's core is an educational philosophy that positions Aevidum advisors in roles to challenge student to find their strengths and then to discover opportunities where they can amplify their voices. These experiences empower students to live lives of purpose and substance.


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## AUTOMOTIVE COLLISION AND REPAIR

### 47.0603 AUTOBODY/COLLISION AND REPAIR TECHNOLOGY/TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)

The Automotive Collision Repair Program is 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. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Chief Easy Liner Collision <br> Repair <br> System <br> Gas and MIG Welders <br> Paint Mixing System <br> Spray Booth <br> Virtual Spray Painter | Automobile Body and <br> Related Repairers <br> Helpers-Installation, <br> Maintenance and <br> Repair Workers <br> Automotive Specialty <br> Technicians <br> Painters, Transportation <br> Equipment | Mechanical Aptitude <br> Ability to Work <br> Independently and in <br> a Team <br> Communication Skills <br> Trouble Shooting Skills |

## CAREERS:

| Automotive Body and Related Repairers |
| :--- |
| Automotive Glass Installers and Repairers |
| Painters, Transportation Equipment |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| S/P2 Collision Repair \& Refinish Safety | S/P2 |
| S/P2 Safety \& Pollution Prevention | S/P2 |
| I-CAR, various levels | I-CAR |

## AUTOMOTIVE TECHNOLOGY

### 47.0604 AUTOMOBILE/AUTOMOTIVE MECHANICS TECHNOLOGY/TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)
Students enrolled in the Automotive Technology Program are prepared 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. The Program consists of a list of PDE required tasks and additional local or value added tasks.

This Program is certified by the National Automotive Technicians Education Foundation (NATEF) and is designed for students who would like to work in the automotive service industry. Automotive technicians need knowledge of electronics, emission control, electricity, mechanics, and hydraulics.

The need for skilled technicians is rapidly increasing. Expanded use of electronics, new government requirements on safety and pollution control, and more extensive warranties on new vehicles require the work of highly skilled technicians and diagnosticians.

| Specialized Equipment: | Related Occupations <br> /Employment Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Computer-based Service <br> Information Database <br> Engine Analyzers <br> Lab Scopes | Automotive Service Technician <br> and Mechanic <br> Scan Tools | Trouble Shooting Skills <br> Rechanical Aptitude <br> Road Force Balancer <br> Machine/Computer Specialty Technician <br> Abministrative Service Manager <br> Precision Measuring to Work <br> Independently and in <br> Instrument |
| A Team <br> Pressure Gauges <br> Digital Image - Alignment <br> Machine |  | Analytical Skills |
| On Vehicle Brake Lathe |  |  |
| Hunter Tire Changer Machine |  |  |

## CAREERS:

Electronic Equipment Installers and Repairers, Motor Vehicles
Automotive Service Technicians \& Mechanics
Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| Certified Safety Inspector, Cat I | Pennsylvania Department of Transportation |
| S/P2 Automotive | S/P2 |
| Section 609 Certification for Refrigerant Recycling <br> and Recovery | Mobile Air Conditioning Society Worldwide |
| Automotive Service Excellence (ASE) | National Automotive Technicians Education <br> Foundation |
| Battery Starting and Charging System | AC Delco |
| Electrical State 1 \& 2 | AC Delco |
| AYES Certificate | Automotive Youth Educational Systems <br> (AYES) |
| Motor Oil Certification | Valvoline |

## BUSINESS AND HOSPITALITY MANAGEMENT

### 52.1801 SALES, DISTRIBUTION AND MARKETING OPERATIONS, GENERAL

(PDE APPROVED PROGRAM OF STUDY)
The Business and Hospitality Management Program focuses on a wide variety of instruction associated with careers in the business and hospitality fields. The program prepares individuals to perform one or more business and hospitality functions such as selling, pricing, promotion, product/service management, distribution, financing, guest services, front office operations, facilities management, resort management and marketing information management. In addition, the instructional program includes varying emphasis on technical knowledge of products and/or services marketed; related communications, economics, technological and computational skills; and abilities and attitudes associated with human relations. The program may also include management functions associated with owning and operating a business. The program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized <br> Equipment: | Related Occupations <br> /Employment Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Computers | General and Operations Manager | Excellent Communication Skills |
|  | Marketing Manager | Decision Making Skills |
|  | Sales Manager | Problem Solving Skills |
|  | Advertising and Promotions | Computer Skills |
|  | Manager | Pleasant Personality |
|  | Supervisor/Manager <br> Retail Sales Worker to Work Independently <br> Customer Service Representative <br> and in a Team |  |

## CAREERS:

| General \& Operations Managers |
| :--- |
| Advertising \& Promotions Managers |
| Marketing Managers |
| Sales Managers |
| First-Line Supervisors of Retail Sales Workers |
| Retail Salespersons |
| Advertising Sales Agent |
| Social Media Specialist |
| Sales Representative, Other Services |
| Sales Representatives |
| Guest Relations |
| Event Planning |
| Entertainment and Leisure Services |
| Food and Beverage Operations |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| A $^{*}$ S $^{*}$ K Certification | $\mathrm{A}^{*} \mathrm{~S}^{*} \mathrm{~K}$ Institute |
| Customer Service and Sales | National Retail Federation Foundation |
| Certified Hospitality and Tourism Management <br> Professional (CHTMP) | American Hotel and Lodging and <br> Educational Institute |

## CARPENTRY

### 46.0201 CARPENTRY/CARPENTER

## (PDE APPROVED PROGRAM OF STUDY)

The Carpentry Program is 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. The Program is designed to provide students with a combination of classroom theory and hands-on building experience in residential, commercial, and industrial construction trades. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment | Related Occupations <br> Employment <br> Opportunities | Personal Qualifications |
| :--- | :--- | :--- |
| Band and Table Saws | Rough Carpenter <br> Bench Shapers | Carpenter Helper <br> Roofer |
| Digm and Disk Sanders | Drywaller | Patience <br> Endurance <br> Molder/Planer Saws |
| Ability to Work <br> Independently <br> and in a Team <br> Planers and Jointers <br> Nailers <br> Radial Arm Saws <br> Routers with Attachments <br> Specialized Power Hand <br> Tools <br> Woodworking Lathes |  | Mechanical Aptitude |
| Communication Skills |  |  |

## CAREERS:

| Supervisors - Construction Trades \& Extraction Workers |
| :--- |
| Carpenters |
| Helpers--Carpenters |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| PBA Skills Certificate | Pennsylvania Builders Association |
| Articulated Ladder | American Ladder Institute |
| Mobile Ladder | American Ladder Institute |
| Single and Extension Ladder | American Ladder Institute |
| Step Ladder | American Ladder Institute |

## COMPUTER INFORMATION SCIENCE

52.1201 MANAGEMENT INFORMATION SYSTEMS AND BUSINESS DATA PROCESSING
(PDE APPROVED PROGRAM OF STUDY)

The Computer Information Science Program is an instructional program that prepares individuals to apply technical knowledge and skills to support the design and development of software applications, manage data systems and related mathematical statistics for analysis and forecasting of business data, process and retrieve business information, and prepare and interpret process and data models.

Students will create a relational database, receive instruction in a variety of computer programming languages including writing, testing and debugging code; writing related system user documentation; demonstrating an understanding of core computer concepts to include the internet and the basic functions of business desktop applications; and analyzing common hardware, software and network processes. Students will receive instruction in business ethics and law, economics, office procedures and communications. Students will learn office safety, computer fundamentals, database administration and computer maintenance/troubleshooting.

| Specialized Equipment: | Related <br> Occupations/Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Workstations | Computer \& Information <br> Systems Managers <br> Interactive TV <br> Data Projectors <br> Wireless Access Point <br> Laser Printer <br> Cloud-based database Systems Analysts <br> and webservers | Computer Programmers <br> Database Administrators <br> Computer Network Architects |

CAREERS:

| Computer \& Information Systems Managers |
| :--- |
| Computer Systems Analysts |
| Computer Programmers |
| Database Administrators |
| Computer Network Architects |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| Microsoft Certified Professional (MCP) | Microsoft |
| Microsoft Office Specialist | Microsoft |
| Microsoft Office Specialist | Certiport |
| Oracle Certification (path based on product) | Oracle |

### 11.0901 COMPUTER SYSTEMS NETWORKING AND TELECOMMUNICATIONS

(PDE APPROVED PROGRAM OF STUDY)

The Computer Networking and Security Program is an instructional program that focuses on the design, implementation and management of linked systems of computers, peripherals and associated software and prepares individuals with the technical skills required to support networks and network users. This Program includes instruction in network technologies and standards: system design, architecture, operating systems, security, communications protocols, client support, messaging services, network management, troubleshooting and server optimization. Those completing the Program may be employed as a network administrator, network specialist, network technician, webmaster, client services analyst (end user) or network operator. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

The core content of this course is focused on nationally recognized certifications. Upon completion of the Program, students may be eligible to obtain up to 30 advanced standing credits at a post-secondary institution based on their career track.

| Specialized Equipment: | Related <br> Occupations/Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Personal Computers | Network \& Computer <br> Systems Administrator <br> Scanners | Problem Solving <br> Cigital Cameras <br> Data Projectors |
| Computer Security Specialist Support Specialist | Srouble Shooting |  |
| Servers | Computer Security | Manual Dexterity |
| Routers |  | Analytical Skills |
| Firewalls |  | Communication Skills |
| Printers | Mechanical Aptitude |  |
| Network Sniffers |  |  |

## CAREERS:

| Computer \& Information Systems Managers |
| :--- |
| Information Security Analysts |
| Web Developers |
| Network \& Computer Systems Administrators |
| Computer Network Architects |
| Computer Network Support Specialists |
| Computer Systems Analysts |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| A+ | Computing Technology Industry Association <br> (Comp TIA) |
| Network+ | Computing Technology Industry Association <br> (Comp TIA) |
| Security+ | Computing Technology Industry Association <br> (Comp TIA) |
| Cisco Certified Network Associate (CCNA) | Cisco |
| PC Pro | Test Out |
| Network Pro | Test Out |
| Security Pro | Test Out |

## COSMETOLOGY

### 12.0401 COSMETOLOGY /COSMETOLOGIST, GENERAL

## (PDE APPROVED CAREER TECH PROGRAM)

The Cosmetology Program is an instructional program that prepares individuals to apply technical knowledge and skills related to the cosmetology industry in a variety of beauty treatments including the care of the hair, skin, and nails. Instruction includes training in giving shampoos, rinses and scalp treatments; hair styling, setting, cutting, coloring, tinting and lightening; permanent waving; facials; manicuring; and hand and arm massaging. The Program includes instruction in bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations. Instruction is designed to qualify students for the licensing examination upon successfully completing 1,250 hours of instruction. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

Based upon hours of instruction needed, we can only accept new $9^{\text {th }}$ and $10^{\text {th }}$ grade students.
\(\left.$$
\begin{array}{|l|l|l|}\hline \text { Specialized Equipment: } & \begin{array}{l}\text { Related Occupations } \\
\text { /Employment } \\
\text { Opportunities: }\end{array} & \text { Personal Qualifications: } \\
\hline \begin{array}{l}\text { For participation in the } \\
\text { program, students are } \\
\text { required to purchase a kit with } \\
\text { the items mandated by the } \\
\text { State Board of Cosmetology } \\
\text { and MCTI. }\end{array} & \begin{array}{l}\text { Manicurist } \\
\text { Hairdresser } \\
\text { Hairstylist } \\
\text { Manager } \\
\text { Skin Care Specialist }\end{array} & \begin{array}{l}\text { Ability to Work } \\
\text { Independently and in } \\
\text { a Team } \\
\text { Problem Solving }\end{array} \\
\begin{array}{l}\text { Students are also required to } \\
\text { purchase a uniform selected } \\
\text { by MCTI. }\end{array} & & \begin{array}{l}\text { Analytical Skills } \\
\text { Creativity }\end{array}
$$ <br>

Patience\end{array}\right\}\)| Endurance |
| :--- |

## CAREERS:

| Hairdressers, Hairstylists \& Cosmetologists |
| :--- |
| Makeup Artists, Theatrical \& Performance |
| Skincare Specialists |

Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| Cosmetologist | Pennsylvania Department of State, <br> State Board of Cosmetology |

## CRIMINAL JUSTICE

### 43.0107 CRIMINAL JUSTICE/POLICE SCIENCE

## (PDE APPROVED PROGRAM OF STUDY)

The Criminal Justice Program is an instructional program that prepares individuals to apply technical knowledge and skills that relate to performing entry-level duties as a patrolman, corrections officer, juvenile officer, security officer and probation officer. The course stresses patrol and related duties such as traffic and crowd control, the American legal system, techniques used in the police laboratory and training in emergency and disaster situations. Also stressed is physical development with a strong emphasis on self-defense and the building of self-confidence. Investigatory techniques such as interviewing and evidence gathering, report writing, a study of juvenile law and procedure, the techniques of crime prevention, the criminal process from arrest through conviction and procedural matters affecting law enforcement such as arrest, search and seizure and legal principles developed in information lessons are utilized in supervised simulated situations. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Personal Protective Equipment <br> CPR Mannequin  <br> Handcuffs  <br> Law Enforcement Gear Belts Police Patrol Officer <br> Security Officer <br> Correctional Officer <br> Police, Fire and <br> Ambulance Dispatchers <br> Forensic Evidence TechnicianPhysical Stamina and <br> Strength <br> Weight Lifting <br> Walking <br> Good Hand and Eye <br> Coordination <br> Problem Solving Skills <br> Ability to Work <br> Independently and in <br> a Team |  |  |
| Patience |  |  |
| Endurance |  |  |
| Good Communication |  |  |
| Skills |  |  |

## CAREERS:

| Bailiffs |
| :--- |
| Correctional Officers \& Jailers |
| Detectives \& Criminal Investigators |
| Police \& Sheriff's Patrol Officers |
| Private Detectives \& Investigators |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| BLS Healthcare Provider | American Heart Association |
| Certificate of Training - Recognition and <br> Identification of Hazardous Materials (HAZMAT) | Pennsylvania State Fire Academy |
| Certified Protection Officer, CPO | International Foundation for Protection <br> Officers |
| NIMS IS 100 Series | Emergency Management Institute |
| NIMS IS 200 Series | Emergency Management Institute |
| NIMS IS 700 Series | Emergency Management Institute |
| NIMS IS 800 Series | Emergency Management Institute |

## CULINARY ARTS

### 12.0508 INSTITUTIONAL FOOD WORKERS

(PDE APPROVED PROGRAM OF STUDY)

The Culinary Arts Program is an instructional program that prepares students for employment related to institutional, commercial or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instruction of skills is provided to individuals desiring to become employed in all areas of the food service industry at entry level. The Program is certified by the American Culinary Federation. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations /Employment Opportunities: | Personal Qualifications: |
| :---: | :---: | :---: |
| Fully Gas-operated <br> Kitchen <br> Brazier and Pressure <br> Steamer <br> Ovens - Conventional <br> and Convection <br> Slicer <br> Broiler <br> Deep-fryer | Waiter/Waitress <br> Food Prep Worker Food Service Manager Cook/Short Order Cook Baker Chef/Head Cook | Ability to Work Independently and in a Team <br> Adapt to Situations Work within Time Constraints Endurance |

CAREERS:

| Chefs \& Head Cooks |
| :--- |
| Supervisors - Food Preparation \& Serving Workers |
| Cooks, Restaurant |
| Cooks, Short Order |
| Food Preparation Workers |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| Certified Fundamental Cook (CFC) | American Culinary Federation |
| ServSafe/Manager Food Safety Certification | National Restaurant Association |
| ServSafe Food Handler Certification | ServSafe |
| ServSafe Allergen Certification | ServSafe |
| ProStart National Certificate of Achievement | Pennsylvania Restaurant \& Lodging <br> Association (PRLA) |

## DIESEL TECHNOLOGY

### 47.0613 MEDIUM/HEAVY VEHICLE AND TRUCK TECHNOLOGY/TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)

The Diesel Technology Program is designed to prepare individuals to apply technical knowledge and skills to the specialized maintenance and repair of trucks, buses, and other commercial and industrial vehicles. This Program includes instruction in diesel engine mechanics, suspension and steering, brake systems, electrical and electronic systems, preventive maintenance inspections, drive trains, HVAC systems, and auxiliary equipment installation and repair.

The Diesel Technology Program includes safety, theory, and general practice. Diesel technicians must like to work with machines and be able to use both hand and power tools. This Program is certified by the National Automotive Technicians Education Foundation (NATEF). The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized <br> Equipment: | Related Occupations <br> /Employment Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Diesel Over-the- <br> road Trucks <br> Diesel Engines <br> Transmissions <br> Braking Systems <br> Drive axles | Bus and Truck Mechanic <br> Diesel Engine Specialist <br> Industrial Machinery <br> Mechanic <br> Automotive Master <br> Mechanic <br> Helpers-Installation <br> Farm Equipment Mechanic | Mechanical and Electronic <br> Abilities <br> Physical Stamina <br> Commercial Driver's <br> License <br> Problem Solving/Trouble <br> Shooting Skills <br> Ability to Work <br> Independently and in <br> a Team |

## CAREERS:

| Bus \& Truck Mechanics \& Diesel Engine Specialists |
| :--- |
| Farm Equipment Mechanics \& Service Technicians |
| Mobile Heavy Equipment Mechanics |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| Certified Safety Inspector, Cat I | PA Department of Transportation |
| Heavy Duty | S/P2 |
| S/P2 Automotive | S/P2 |
| S/P2 Safety \& Pollution Prevention | S/P2 |
| Section 609 Certification for Refrigerant <br> Recycling and Recovery | National Institute for Automotive Service <br> Excellence |
| Get Ahead | Daimler Trucks North America |

## DIVERSIFIED OCCUPATIONS

### 32.0105 JOB-SEEKING/CHANGING SKILLS (Diversified Occupations)

## (PDE APPROVED CAREER TECH PROGRAM)

The Diversified Occupations Program (DO) is a one-year instructional program for seniors that operates as an integral part of vocational education to provide a cooperative arrangement between the school and employers whereby the student receives general education instruction in the school and on-thejob training through part-time employment in business/industry. The area of training may be in any vocational education area where there are needs for trained persons and must relate to the student's career objective.

The DO Program is a partnership between MCTI, the sending district, the student and the student's parents, and the employer. This training program is designed to help the student to transition from school to the world of work while gaining valuable life and work experience. Students are responsible for finding part-time employment with a local employer which is directly related to the career field they wish to pursue after graduating from high school. This Program is conducted at the student's district high school campus.

| Specialized <br> Equipment: | Related Occupations <br> /Employment Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Equipment will be <br> specific to the industry <br> and work place | Vary by career pathway | Dependent upon the specific <br> career and work place |

CAREERS: Career opportunities will be determined upon receiving employment in a specific industry.

Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |

# DRAFTING \& DESIGN TECHNOLOGY 

### 15.1301 DRAFTING AND DESIGN TECHNOLOGY/TECHNICIAN, GENERAL

(PDE APPROVED PROGRAM OF STUDY)

Drafting \& Design Technology is an instructional program that generally prepares individuals to apply technical knowledge and skills as each relates to gathering and translating of data or specifications including basic aspects of planning, preparing and interpreting mechanical, architectural, structural, civil, electrical/electronic, topographical and other drawings and sketches used in various engineering fields. Instruction is designed to provide experiences in drawing and CAD; the use of reproduction materials, equipment and processes; the preparation of reports and data sheets for writing specifications; the development of plan and process charts indicating dimensions, tolerances, fasteners, joint requirements and other engineering data; the development of models; and drafting multiple view assembly and sub-assembly drawings as required for manufacture, construction and repair of mechanisms. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

Students who successfully complete the Program will have the opportunity to work as entry level CADTechnicians with mechanical, architectural, and civil drafting professionals. Students may also work in many related careers such as surveying, construction estimating, and specification writing.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Parallel Sliders | Mechanical Drafter | Problem Solving |
| Triangles and Scales | Architectural Drafter | Manual Dexterity |
| Auto-Cad | Civil Drafter | Analytical Skills |
| Architectural Desktop | Interior Designer | Communication Skills |
| Mechanical Desktop | Engineering | Mechanical Aptitude |

## CAREERS:

Architectural \& Civil Drafters
Mechanical Drafters

Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |

# ELECTRICAL TECHNOLOGY 

### 46.0399 ELECTRICAL AND POWER TRANSMISSION INSTALLERS, OTHER

(PDE APPROVED PROGRAM OF STUDY)

The Electrical Technology Program is 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. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

Students are also given the opportunity to pursue advanced training in motor control circuits and power technology applications. Students are also afforded the opportunity to study home automation by using the Smart Home Technology. Students receive practical experience by completing many projects.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Basic and Advanced | Electrician Helper <br> Electrical Trainers <br> Conduit Bending <br> Equipment <br> Power Wire Pullers <br> Smart House <br> Technology Trainers Apprentice <br> Analog and Digital <br> Testing Equipment Supervisor <br> and Manager <br> Electric Motor and <br> Sotor Control Trainers <br> PLC Trainers | Switch Assembler <br> and Repairer |
|  |  | Mechanical Aptitude <br> Problem Solving Skills <br> \& Troubleshooting <br> Skills <br> Analytic Skills <br> Ability to Work <br> Independently and in <br> a Team |

## CAREERS:

| Electricians |
| :--- |
| Helpers--Electricians |
| Security \& Fire Alarm Systems Installers |
| Electrical Power-Line Installers \& Repairers |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| PBA Skills Certificate | Pennsylvania Builders Association |
| Articulated Ladder | American Ladder Institute |
| Mobile Ladder | American Ladder Institute |
| Single and Extension Ladder | American Ladder Institute |
| Step Ladder | American Ladder Institute |

# ELECTRONICS TECHNOLOGY 

### 15.0303 ELECTRICAL, ELECTRONIC AND COMMUNICATIONS ENGINEERING TECHNOLOGY/TECHNICIAN

## (PDE APPROVED PROGRAM OF STUDY)

Electronics Technology is an instructional program that prepares individuals to apply basic electronic principles and technical skills to the production, calibration, estimation, testing, assembling, installation and maintenance of electronic equipment. Emphasis is on passive components and solid-state devices; digital circuits; optoelectronic devices; operational amplifiers; audio and RF amplifiers; oscillators; power supplies; and AM, FM and PCM modulators. Knowledge is acquired through theoretical instruction, experimentation and hands-on activities. Instruction will develop basic levels of knowledge, understanding and associated skills essential for entry-level employment in communications, industrial electronics, digital processing, robotics, avionics, biomedical technology and other electronics occupations. Through collaborative curriculum planning with colleges and trade schools, students who participate in this Program are eligible to obtain up to 12 credits advanced standing in a post-secondary program. This Program participates in the Electronics Technicians Association, International Student Certification Program. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> lEmployment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Oscilloscope | Production Repairer <br> Flectronic Assembler <br> Function Generator <br> Power Supplies <br> Logic Probes <br> Multimeters | Communication Skills <br> Electronic Technician <br> Communication <br> Technician <br> Electronic Engineer | | Manual Dexterity |
| :--- |
| Trouble Shooting Skills |

CAREERS:

| Electrical \& Electronic Drafters |
| :--- |
| Electrical \& Electronic Engineering Technologists/Technicians |
| Electro-Mechanical \& Mechatronics Technologists/Technicians |
| Electrical \& Electronics Repairers, Powerhouse, Substation \& Relay |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| Articulated Ladder | American Ladder Institute |
| Mobile Ladder | American Ladder Institute |
| Single and Extension Ladder | American Ladder Institute |
| Step Ladder | American Ladder Institute |

## GRAPHIC COMMUNICATIONS

### 10.0399 GRAPHIC COMMUNICATIONS, OTHER

## (PDE APPROVED PROGRAM OF STUDY)

Graphic Communications is an instructional program that generally prepares individuals to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual image and print products using mechanical, electronic and digital graphic and printing equipment. Students learn desktop publishing, layout, composition, presswork and bindery as well as photography, and several graphic arts techniques. Emphasis is on typographical layout and design using computer graphics, photo typesetting, platemaking, offset preparation and operation, paper cutting, ink and color preparation and dynamics and airbrush and screen printing production.

Concentration in the area of graphic arts will permit the student to work in computer design, digital prepress, press work, Sign making/vehicle graphics, screen printing, sandblasting, and more. In addition, the student will be instructed in various finishing operations. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| ProPrint Offset/duplicator printers | Graphic Designer | Artistic Ability/Creativity |
| ABdick Offset/duplicator printers | Desktop Publisher | Communication Skills |
| Xerox Color copier | Commercial Printing Plants | Creative Drive with a Vision |
| Xante Plate Maker 5 \& Black \& White | Magazine Publishers | Goal Oriented |
| Printer | Patience |  |
| Epson 44"Large Format Color Plotter | Advertising Agencies |  |
| Morgan Folding, Scoring, Perforating | Self-Employment | Enjoys Hands-on Work |
| Machine | Problem solving |  |
| GBC 44" Hot Laminator \& Mounting | Screen Printer | troubleshooting Skills |
| Machine | Professional Mannerism |  |
| Saddlestich Machine | Works Well in Groups |  |
| Multi-die Book Binding Machine | Ofishing/Production Worker | Cognitive Skills |
| Xante Illumina Digital Off-set Press | Art Director | Highly Motivated Self-Starters |
| Vinyl Graphic Cutter | Project Management | Business Skills |
| Hydraulic Paper Cutter | Specialty Shops |  |
| Hydraulic 3-Hole Punch Machine |  |  |
| 4-Color Screen Printing Machine |  |  |
| Screen Printing 30" Dryer |  |  |
| Imprintor |  |  |
| 44" Cold Laminator |  |  |
| Heat Press Transfer Machine |  |  |
| Xcaliber Board Trimmer |  |  |
| 40" Rotary Trimmer |  |  |
| Air Brush Equipment |  |  |
| Padding Equipment |  |  |
| Bates Numbering System |  |  |
| Exposure Unit |  |  |
| Light Table |  |  |
| Digital Equipment: |  |  |
| Camera - Computers |  |  |

CAREERS:

| Commercial \& Industrial Designers |
| :--- |
| Graphic Designers |
| Desktop Publishers |
| Prepress Technicians and Workers |
| Printing Press Operators |
| Etchers \& Engravers |

Certification available to qualified students:

## HEALTH PROFESSIONS

### 51.9999 HEALTH CARE TECHNOLOGY

(PDE APPROVED PROGRAM OF STUDY)

Health Professions provides students with a variety of educational, informational and biological technology to prepare students for future employment in an ever-changing diverse healthcare field. Students completing Monroe Career \& Technical Institute's Health Professions will find themselves well prepared to enter the workforce as a PCA (Patient Care Attendant) or Homecare Provider. Upon successful completion, students will have obtained First Aid, CPR, AED and Direct Care Staff Certifications. The Health Professions program includes an extensive eight-week shadowing experience for seniors at an approved medical facility. The student shadowing experience encompasses live interaction within the following disciplines: Emergency Care, Laboratory Procedures, Medical Surgical Unit, Radiology, Respiratory Therapy, Social Services, Therapy, and Ultrasound Technology. Successful students will also be prepared to obtain additional certifications in Phlebotomy, EMT, Medical Assistant, EKG and Nurse Aide with MCTI's ACE (Adult Continuing Education) evening program and/or participate in an articulation agreement with Northampton Community College.

| Specialized Equipment: | Related Occupations <br> IEmployment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Datascope | Patient Care Attendant (PCA) |  |
| Pulse Oximeter | Dependable <br> Computer and Software <br> Poblem Solving Skills <br> Dental Operatory <br> Operational Patient Units |  |
| Strellent Communication |  |  |
| Skretcher | Skills |  |
| Rehabilitation Equipment |  | Able to Work <br> Independently and in a <br> Mechanical Lifts |
| CPR Mannequins |  | Critical Thinking Skills |
| Wheelchairs |  |  |

## CAREERS:

| Health Technologists \& Technicians, Other |
| :--- |
| Healthcare Practitioners \& Technical Workers, Other |
| Healthcare Support Workers, Other |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification - Healthcare | CareerSafe |
| BLS Healthcare Provider | American Heart Association |
| Personal Care Home Direct Care Staff Certificate | Pennsylvania Department of Human <br> Services |

# HORTICULTURE (Floriculture \& Landscaping) 

01.0601 APPLIED HORTICULTURE/HORTICULTURAL OPERATIONS, GENERAL
(PDE APPROVED PROGRAM OF STUDY)

An instructional program having a combination of organized subject matter and practical experiences that generally prepares individuals to produce, process and market plants, shrubs and trees used principally for ornamental, recreational and aesthetic purposes and to establish, maintain and manage horticultural enterprises. Instruction emphasizes knowledge, understanding and application important to establishing, maintaining and managing horticultural enterprises such as arboriculture, floriculture, greenhouse operation and management, landscaping, nursery operation and management and turf management. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized <br> Equipment: | Related <br> Occupations/Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Mowers | Landscape Architect <br> Skid Steer | Landscaping and Grounds <br> Keeping |
| Agricultural Worker <br> String Trimmer <br> Nursery and Greenhouse <br> Computers <br> Tillers | Wbility to Work <br> Independently and in <br> Arbers | a Team <br> Problem Solving |

## CAREERS:

| Farmers, Ranchers, and Other Agricultural Managers |
| :--- |
| Nursery and Greenhouse Managers |
| Floral Designer |
| First-Line Supervisors of Landscaping, Lawn Service, \& Groundskeeping Workers |
| Landscaping \& Groundskeeping Workers |
| Retail Salesperson |
| Farmworkers and Laborers, Crop, Nursery and Greenhouse |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification - Agriculture | CareerSafe |
| National Safe Tractor and Machinery | Hazardous Occupations and Safety Training in <br> Opriculture (HOSTA) |
| Certified Landscape Technician (CLT) | Pennsylvania Department of Agriculture |
| Pennsylvania Certified Horticulturist (PCH) | Pennsylvania Department of Agriculture |
| Worker Protection Standard Training | US Environmental Protection Agency Region III |

# HEATING, VENTILATION \& AIR CONDITIONING <br> 47.0201 HEATING, AIR CONDITIONING, VENTILATION <br> AND REFRIGERATION MAINTENANCE TECHNOLOGY/TECHNICIAN <br> (PDE APPROVED PROGRAM OF STUDY) 

The Heating, Ventilation \& Air Conditioning (HVAC) Program is an instructional program that combines classroom and practical learning experiences. This Program 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. This Program is certified by the National Center for Construction Education and Research. The Program consists of a list of PDE required tasks and additional local or value added tasks.

| Specialized Equipment: | Related Occupations /Employment Opportunities: | Personal Qualifications: |
| :---: | :---: | :---: |
| Electric Pipe Threader <br> Acetylene and Propane <br> Gas Torches <br> Bacharach Tester <br> Arc Welders <br> Reclaim and Recovery Unit <br> Refrigerant <br> High Pressure Indicators <br> Electrical Meters <br> Thermal Testers <br> Compressor Testers | Helpers- Installation, <br> Maintenance, and <br> Repair Workers <br> Refrigeration Mechanic <br> Air Conditioning and <br> Heating Mechanics <br> First Line Supervisors of Production and Operating Workers Stationary Engineer | Mechanical Aptitude <br> Ability to Work Independently and in a Team <br> Problem Solving Troubleshooting Skills Communication Skills |

## CAREERS:

Heating, Air Conditioning, \& Refrigeration Mechanics \& Installers
Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| EPA 608 Certification | Air Conditioning and Refrigeration Institute |
| PBA Skills Certificate | Pennsylvania Builders Association |

## MASONRY

### 46.0101 MASON/MASONRY

## (PDE APPROVED PROGRAM OF STUDY)

The Masonry Program is an instructional program that prepares individuals to apply technical knowledge and skills in the laying and/or setting of brick, concrete block, glass block, hard tile, marble and related materials using trowels, levels, hammers, chisels and other hand tools. The masonry curriculum combines classroom and practical learning experience including projects. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized | Related Occupations | Personal Qualifications: |
| :--- | :--- | :--- |
| Equipment: | /Employment Opportunities: |  |
| Trowels | Brickmasons and | Ability to Work |
| Levels | Blockmasons | Independently and in |
| Hammers and | Tile and Marble Setters | Creativity |
| Chisels | Segmental Pavers | Patience |
| Jointers | Cement Mason and Concrete | Communication Skills |
| Diamond Blade | Finishers |  |
| Saws | First-line Supervisors and |  |
| Spacing Rulers | Managers/Supervisors- |  |
| Mortar Mixers | Construction Trade Workers |  |
| Hydraulic Cutters |  |  |
| Bull Floats |  |  |

CAREERS:

| Supervisors - Construction Trades \& Extraction Workers |
| :--- |
| Brickmasons \& Blockmasons |
| Stonemasons |
| Tile and Stone Setters |
| Helpers---Brickmasons, Blockmasons, Stonemasons, \& Tile \& Marble Setters |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| PBA Skills Certificate | Pennsylvania Builders Association |
| Articulated Ladder | American Ladder Institute |
| Mobile Ladder | American Ladder Institute |
| Single and Extension Ladder | American Ladder Institute |
| Step Ladder | American Ladder Institute |

# OUTDOOR POWER EQUIPMENT TECHNOLOGY 

### 47.0699 VEHICLE MAINTENANCE AND REPAIR TECHNOLOGIES, OTHER

(PDE APPROVED CAREER TECH PROGRAM)

The Outdoor Power Equipment Technology Program is an instructional program that prepares individuals to apply technical knowledge and skills to repair, service, maintain and diagnose problems on a variety of small internal-combustion gasoline engines and related systems used on portable power equipment such as lawn and garden equipment, chain saws, outboard motors, rototillers, snowmobiles, lawn mowers, motorcycles, personal watercraft and pumps and generators. This Program includes instruction in the principles of the internal-combustion engine and all systems related to the powered unit. Instruction also includes the use of technical and service manuals, state inspection code, care and use of tools and test equipment, engine tune-up/maintenance, engine overhaul, troubleshooting and diagnostic techniques, drive lines and propulsion systems, electrical and electronic systems, suspension and steering systems and service operations and parts management. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Drill Press | Engine Repairer <br> Service | Handling and Moving <br> Objects <br> Baw Saw |
| Jable Vise | Gas-Engine Repairer |  |
| Bench Grinders | Making Decisions and |  |
| Mower Blade | Small-Engine Mechanic | Solving problems <br> Balancer/Sharpener <br> Hydraulic Press <br> Grinding Machine |
| Mechanic |  | Analytical Thinking <br> Power Hone |
| Soring Bar |  | Mathematrol |
| Ableally inclined to interpret technical |  |  |

CAREERS:

| First-Line Supervisors of Mechanics, Installers, \& Repairers |
| :--- |
| Motorboat Mechanics and Service Technicians |
| Motorcycle Mechanics |
| Outdoor Power Equipment and Other Small Engine Mechanics |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| Outdoor Power Equipment Technician Certification | Equipment and Engine Training Council |
| Master Service Technician | Briggs and Stratton Corporation |
| STIHL MasterWrench Service Technician-Bronze | STIHL |
| S/P2 Safety and Pollution Prevention | S/P2 |
| S/P2 Automotive | S/P2 |

## PLUMBING TECHNOLOGY

### 46.0503 PLUMBING TECHNOLOGY/PLUMBER

## (PDE APPROVED PROGRAM OF STUDY)

Plumbing Technology is an instructional program that prepares individuals to practice as licensed plumbers by applying technical knowledge, safety and skills to lay out, assemble, install and maintain plumbing fixtures and systems for steam, natural gas, oil, hot water, heating, cooling, drainage, lubricating, sprinkling and industrial processing systems in home and business environments. The Program includes instruction in source determination, water distribution, waste removal, pressure adjustment, basic physics, technical mathematics, blueprint reading, pipe installation, pumps, brazing and soldering, plumbing inspection and applicable codes and standards.

The Program combines classroom and practical learning experiences. Students also become involved with many community service projects related to their program of study. This Program is certified by the National Center for Construction Education and Research. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| Electric Pipe Threader <br> Acetylene and Propane <br> Gas Torches <br> Burner Test Bench <br> Bacharach Tester <br> Gas Welders | Pipefitter and <br> Steamfitter Plumbers <br> Plumber <br> Heating and Air <br> Conditioning <br> Mechanics <br> First Line Supervisor <br> Managers and Mechanics, <br> Installers <br> and Repairers | Mechanical Aptitude <br> Ability to Work <br> Independently and in <br> a team |
| Problem Solving |  |  |
| Troubleshooting Skills |  |  |
| Communication Skills |  |  |

CAREERS:

| Supervisors - Construction Trades \& Extraction Workers |
| :--- |
| Plumbers, Pipefitters, \& Steamfitters |
| Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters |

Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| EPA 608 Certification | Air Conditioning and Refrigeration Institute |
| PBA Skills Certificate | Pennsylvania Builders Association |

## PRECISION MACHINING

### 48.0501 MACHINE TOOL TECHNOLOGY/MACHINIST

## (PDE APPROVED PROGRAM OF STUDY)

The Precision Machining Program is an instructional program designed to give individuals instruction, knowledge and skills in all aspects of shaping parts for industrial application. Instruction involves making computations relating to work dimensions, tooling and feeds and speeds of machining. Emphasis is placed upon bench work and the operation of lathes, power saws, milling machines, grinders, drills and computer operated equipment (CNC and CIM). Instruction also includes the use of precision measuring instruments such as layout tools, micrometers and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares students to operate all types of hand and computer-controlled machines.

The Program provides both practical skills and related theory in machine tool operation, CAD drawings along with the technical mathematics, science, and communication skills essential to a career in manufacturing. The Program is certified by the National Institute for Metalworking Skills, Inc. (NIMS). The Program consists of a list of PDE required tasks and additional local or value-added tasks. Students can earn credentials from NIMS.

| Specialized Equipment: | Related <br> Occupations/Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| CNC Lathe | Machine Tool Setter | Mechanical Aptitude |
| CNC Milling Machine | Machinist | Manual Dexterity |
| Drill Press | Machine Tool Operator | Ability to Work |
| Horizontal and Vertical | Independently and <br> Band Saw Die Maker <br> in a Team <br> Vertical/Horizontal Milling <br> Machines <br> Surface Grinders | Mechanical Engineer <br> Mechanical Inspector |
| Computers with Mastercam | CNC Programmer |  |
| Cad/Cam Software |  |  |
| Lathes |  |  |
| 3D Printer |  |  |
| 3D Scanner |  |  |
| CNC Router |  |  |

CAREERS:

| Computer-Controlled Machine Tool Operators |
| :--- |
| Computer Numerically Controlled Machine Tool Programmers |
| Machinists |
| Multiple Machine Tool Setters, Operators, \& Tenders, Metal \& Plastic |
| Tool \& Die Makers |

Certifications available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| NIMS Machining Level I | National Institute for Metalworking Skills, Inc. |
| NIMS CNC Milling: Programming Setup and Operations | National Institute for Metalworking Skills, Inc. |
| NIMS CNC Turning: Programming Setup and Operations | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I CNC Milling | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I CNC Turning | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I Manual Drill Press Operations | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I Manual Milling | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I Manual Surface Grinding | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I Manual Turning Between Centers | National Institute for Metalworking Skills, Inc. |
| NIMS Machining Level I Manual Turning with Chucking | National Institute for Metalworking Skills, Inc. |

## WELDING TECHNOLOGY

### 48.0508 WELDING TECHNOLOGY/WELDER

(PDE APPROVED PROGRAM OF STUDY)

The Welding Technology Program is 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; positioning and clamping; and welding standards established by the American Welding Society (AWS), American Society of Mechanical Engineers and American Bureau of Ships. The Program is certified by the American Welding Society. The Program consists of a list of PDE required tasks and additional local or value-added tasks.

| Specialized Equipment: | Related Occupations <br> /Employment <br> Opportunities: | Personal Qualifications: |
| :--- | :--- | :--- |
| SMAW, GMAW, GTAW, <br> FCAW equipment | Combination Welder <br> Skilled production Welders <br> and Laborers <br> Cutting equipment | Mechanical Aptitude <br> All of the above is used <br> Engineering Technician <br> with steel, stainless <br> steel, and aluminum |

## CAREERS:

| Welders, Cutters, Solderers, \& Brazers |
| :--- |
| Welding, Soldering, \& Brazing Machine Setters, Operators, and Tenders |

Certification available to qualified students:

| Industry Certification | Provider Name |
| :--- | :--- |
| OSHA Certification | CareerSafe |
| Certified Welder | American Welding Society |
| SMAW 1G 7018 D1.1 Code | American Welding Society |
| SMAW 2G 7018 D1.1 Code | American Welding Society |
| SMAW 3G 7018 D1.1 Code | American Welding Society |
| SMAW 4G 7018 D1.1 Code | American Welding Society |
| FCAW 1G D1.1 Code | American Welding Society |
| FCAW 2G D1.1 Code | American Welding Society |
| FCAW 3G D1.1 Code | American Welding Society |
| FCAW 4G D1.1 Code | American Welding Society |

