



Pocono Mountain School District
High School Program of Studies
2026- 2027 Catalog



**WEST
PRIDE**

TABLE OF CONTENTS

KEYSTONE EXAM PROFICIENCY AND GRADUATION REQUIREMENTS	3
CAREER READINESS INDICATOR FOR FUTURE READY PA INDEX	6
KEYSTONE TUTORIAL COURSE.....	7
ACADEMIC STANDARDS DEMONSTRATION	7
SCHEDULING LIMITATIONS.....	7
REPEATED COURSES	7
2026-2027 COURSE SEQUENCING GUIDE	8
NCAA ATHLETIC INITIAL ELIGIBILITY STANDARDS.....	10
ADDITIONAL PROGRAMS.....	10
SPECIAL EDUCATION	12
GIFTED EDUCATION	12
CAREER PATHWAYS.....	13
ADVANCED PLACEMENT CAPSTONE COURSES.....	27
PMSD PA SEAL OF BILITERACY	28
ART.....	30
BUSINESS & TECHNOLOGY.....	35
ENGLISH LANGUAGE ARTS (ELA)	43
FAMILY AND CONSUMER SCIENCES	52
HEALTH, PHYSICAL EDUCATION & SAFETY.....	55
MATHEMATICS.....	62
MUSIC.....	71
SCIENCE.....	78
SOCIAL STUDIES	86
WORLD LANGUAGES	91
MCTI PROGRAM GUIDE.....	94

*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. The 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 21st 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.

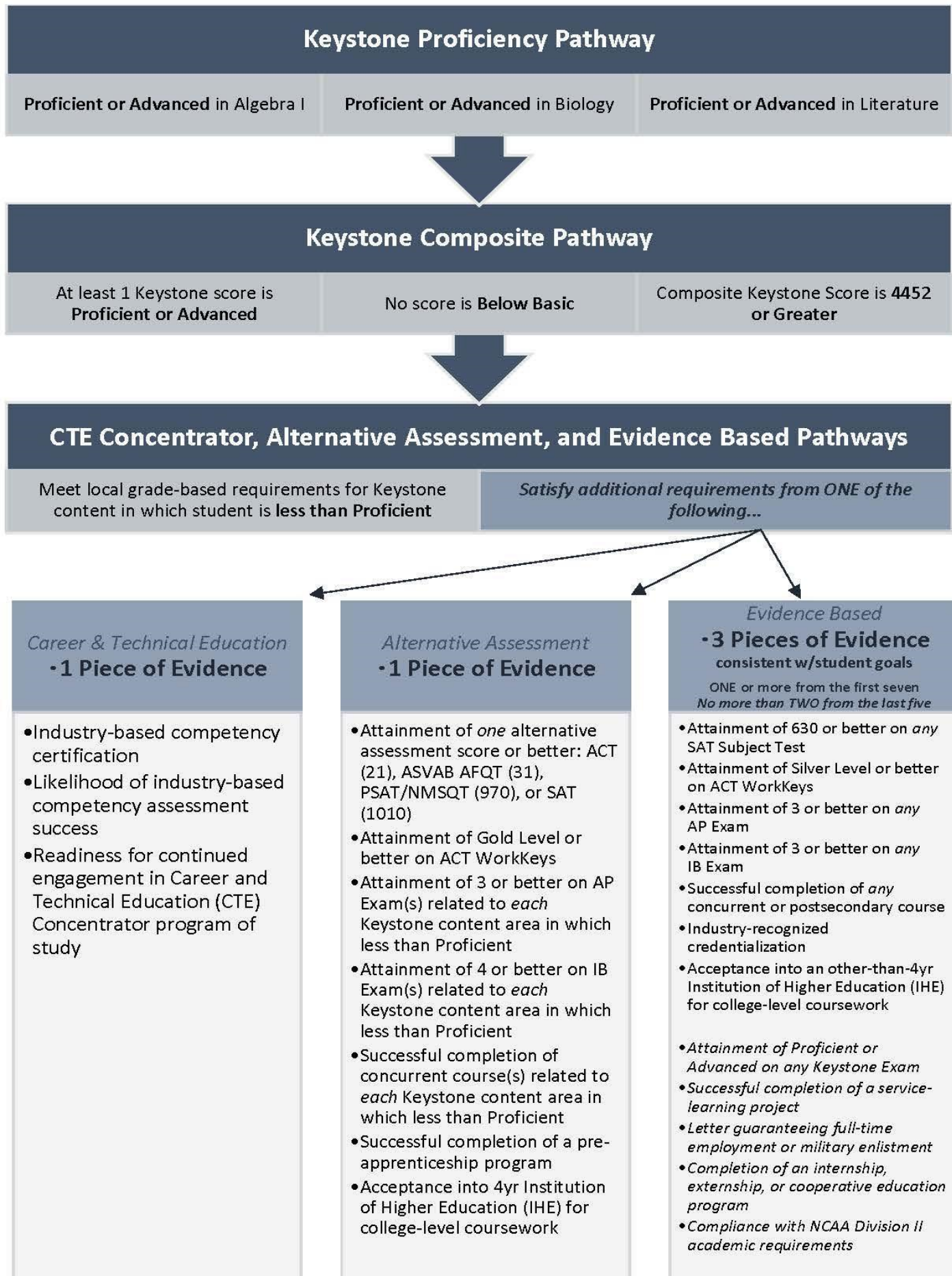
For students graduating in 2023 and beyond, the following options exist to meet the statewide graduation requirement:

- **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



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 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 standards-aligned and evidence-based.
- The percentage of students who demonstrate meaningful engagement in career exploration and preparation and implementation of individualized career plans through separate, specific measures based on grade-level 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
<ul style="list-style-type: none">• 6 pieces of evidence• 2 per year, per grade level• At least 1 piece of evidence per CEW Strand	<ul style="list-style-type: none">• Student has a career portfolio containing the K-5 evidence• Additional 6 pieces of evidence• 2 per year, per grade level• At least 1 piece of evidence per CEW Strand• One of the pieces of evidence for the 6-8 band must be the student's individualized career plan	<ul style="list-style-type: none">• Student has a career portfolio containing the K-5 and 6-8 grade band evidence• Additional 8 pieces of evidence collected in grades 9-11• 2 per year per grade level• At least 1 piece of evidence per CEW Strand• At least 2 pieces of evidence for the 9-11 grade band must demonstrate implementation of the student's individualized career plan• 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

The 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.

2026-2027 COURSE SEQUENCING GUIDE

CORE COURSE SEQUENCES

Advanced Placement (AP) and 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	World Language (not a core course)
9	Honors ELA 9	Honors Geometry	Honors Biology	AP Human Geography	
10	Honors ELA 10	Honors Algebra II	Honors Chemistry AP Biology AP Environmental Science	Honors Civics AP US History AP European History AP Psychology AP Human Geography AP World History AP US Government & Politics	Honors Spanish IV French IV German IV
11	Honors ELA 11 AP Language and Composition	Honors Pre-Calculus AP Statistics	Honors Physics Honors Earth Science AP Biology AP Chem AP Environmental Science	Honors Modern US History AP European History AP US History AP Psychology AP Human Geography AP World History	AP Spanish AP French AP German
12	Honors ELA 12 AP Language and Composition AP Literature and Composition	Honors Calculus AP Calc AB AP Calc BC AP Statistics	AP Biology AP Physics AP Chem AP Environmental Science	Honors World History AP European History AP US History AP Psychology AP Human Geography AP World History	AP Spanish AP French 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 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 Science	Modern US History
12	Academic ELA 12	Academic Pre-Calculus Statistics Algebra III Trig	Elective	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 Arts (ELA)	Mathematics	Science	Social Studies
9	Academic ELA 9	Algebra IA	Environmental Science	Elective
10	Academic ELA 10	Algebra IB/Algebra Enhancement	Biology	Civics
11	Academic ELA 11	Algebra II	Earth Science or General Physical Science	Modern US History
12	Academic ELA 12	Geometry	Elective	World History

NCAA ATHLETIC INITIAL ELIGIBILITY STANDARDS

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 13 - 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).

ADDITIONAL PROGRAMS

MONROE CAREER & TECHNICAL INSTITUTE (MCTI)

The career and technical program begin 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. 117)

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 (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:

- 9th grade – Career Awareness
- 10th grade – Career Exploration
- 11th grade – Career Planning
- 12th 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

HYBRID SCHEDULING

Students may be enrolled in both Cyber School and their Home School Building (East/West High Schools). Hybrid scheduling allows students to take classes through the Cyber Platform (Imagine Edgenuity) while enrolling in other classes in the traditional school building. If a student is enrolled in traditional, in-person, courses at their home building and enrolled in one (1) or more courses in the PMSD Cyber Program the schedule is considered Hybrid. The combination of courses total six (6), meeting but not exceeding the traditional scheduling requirements. Hybrid courses follow the same grading criteria and GPA applications as the traditional courses and are graded on the traditional schedule (progress report/report card) over four marking periods.

INDEPENDENT STUDY

The Independent Study Program is designed for students who have demonstrated a high degree of motivation and have the ability to work independently. Independent courses are scheduled and run outside the traditional school day. These courses are scheduled beyond the traditional six (6) credits. To enroll in an independent study program, a student must have the approval of the school counselor, the high school principal, the cyber director, the curriculum director and the assistant superintendent. All students approved for an independent study must receive a percentage grade for the courses that follow the same grading criteria and GPA applications as the traditional courses and are graded on the traditional schedule (progress report/report card) over four marking periods. Independent courses will be limited to four (4) credits per student throughout high school - only two (2) credits can be Honors or AP courses; additionally, Keystone trigger courses are not eligible for Independent Study. Once approved, participation in Independent Study will require parent/guardian and student acknowledgement of the course specific requirements.

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

The 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 9th through 12th 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 the 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: Art, Introduction to STEM, Yearbook, Music, Graphic Design, Video Production, 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	Computer Systems
Advertising	Office Administration
Marketing	Entrepreneurship
Hospitality/Tourism	Management
Sales	Finance

Some courses that apply to the **Business Finance & Information Technology (BIT)** Pathway are: Accounting, Computer Science 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	Electrician
Engineer (mechanical, electrical, chemical, nuclear, automotive, etc.)	Carpenter/Woodworker
Automotive Technician	CAD Designer
Network Administrator	Computer Engineer/Programmer
CNC Machinist	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, AP Environmental Science, Chemistry, Biology, Environmental Science, Physics, TRAINED, 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	Child Care Provider
Law enforcement	Lawyer
Government Positions	Military Careers
Education	

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

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	Nutritionist
Pharmacist	Emergency Medical Technician
Pharmacy Technician	Psychologist
Forestry	Landscape Design/Landscaper
Conservation Officer	Wildlife or Zoo Technician
Food Scientist/Researcher	Any aspect of Agriculture

Some courses that apply to the ***Science and Health (SH)*** Pathway are: Studio Art, Drawing, Psychology/Sociology, Health Emergencies, Fitness/Sport Nutrition, Strength and Conditioning, Human Anatomy, Environmental Science, AP Environmental Science, Introduction to Engineering Design I and II, Principles of Engineering Design I and II, Aviation STEM, TRAINED, Statistics, Calculus, Chemistry, Biology, Physics, and Zoology.

ARTS AND COMMUNICATION COURSE OF STUDY

This sample 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 th		10 th		11 th		12 th	
* ELA	Academic or Honors 9 Writer's Workshop I Digital Journalism I Intro to Theater Arts	*ELA	Academic or Honors 10 or Honors 10 Writer's Workshop I & II Digital Journalism I & II Intro to Theater Arts Advanced Theater Arts	* ELA	Academic, Honors 11 or AP Language & Comp Writer's Workshop I & II Digital Journalism I , II & III Intro to Theater Arts Advanced Theater Arts	* ELA	Academic, Honors 12 or AP Lit & Comp**AP Lang. & Comp Writer's Workshop I & II Digital Journalism I, II & III Intro to Theater Arts Advanced Theater Arts
*Math	Algebra I A Algebra I (Ac) Geometry (Ac/H) TRAINED	*Math	Algebra I B/Algebra Enhancement Geometry (Ac) Algebra II (Ac/H) TRAINED	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Pre-Calculus (Ac/H) TRAINED	*Math	Geometry College Algebra Statistics Pre-Calculus (Ac/H) Honors Calculus (H) **AP Calculus AB, BC **AP Statistics TRAINED
*Science	Environmental Science Biology Intro to STEM TRAINED	*Science	**AP Biology Biology Chemistry Science Intro to STEM TRAINED	*Science	**AP Chemistry **AP Environmental Science Physics Earth Science or General Physical Science Human Anatomy Intro to STEM TRAINED	*Science	**AP Physics Intro to STEM TRAINED
*Social Studies	**AP Human Geography	*Social Studies	Civics or **AP Government	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP World History
PE/PE	Health/Finance A					*PE/PE	Health/Finance B
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 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 Seminar 11, 12 AP Research Grade 11,12	Prerequisite AP Seminar	AP Seminar 11, 12 AP Research 12	Prerequisite AP Seminar

Courses above are graduation requirements (*) 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 Management Advertising Marketing and Sales Computers & Technology Web Development Presentations to Groups Legal issues Accounting Different work sites	Work easily with others Organize your time efficiently Work with statistics Use computers & other technology Pay attention to details Solve problems Work independently Show initiative Work on a team	Meeting with groups Making budgets Organizing a project Planning an event Working with technology Selling products and services Processing numbers and figures Preparing financial reports Following directions Learning new software programs

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

BUSINESS FINANCE AND INFORMATION TECHNOLOGY COURSE OF STUDY

This sample 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.

9th		10th		11th		12th	
* English Language Arts	Academic or Honors 9	* English Language Arts	Academic or Honors 10	* English Language Arts	Academic or Honors 11 AP Language & Comp	* English Language Arts	Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (Ac/H) TRAINED	*Math	Algebra I B/Algebra Enhancement Geometry (Ac) Algebra II (Ac/H) TRAINED	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics PreCalculus(Ac/H) TRAINED	*Math	Geometry College Algebra Statistics PreCalculus(Ac/H) Honors Calculus (H) **AP Calculus AB, BC **AP Statistics TRAINED
*Science	Environmental Science Biology Intro to STEM TRAINED	*Science	**AP Biology Biology Chemistry Zoology Intro to STEM TRAINED	*Science	**AP Chemistry **AP Environmental Science Physics Earth Science or General Physical Science Human Anatomy Intro to STEM TRAINED	*Science	**AP Physics Intro to STEM TRAINED
*Social Studies	**AP Human Geography	*Social Studies	Civics or **AP US Government	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP World History
*PE/PE	Health/Finance A					*PE/PE	Health/Finance B
(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 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 Seminar Grade 11 AP Research Grade 11,12	Prerequisite: AP Seminar	AP Research Grade 11,12	Prerequisite: AP Seminar
<p style="text-align: center;">Courses above are graduation requirements (*) and/or recommended (R) for this Pathway **Elective course for this pathway</p>							

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

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

ENGINEERING AND INDUSTRIAL TECHNOLOGY COURSE OF STUDY

This sample 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.

9th		10th		11th		12th	
* English Language Arts	Academic or Honors 9	* English Language Arts	Academic or Honors 10	* English Language Arts	Academic or Honors 11 AP Language &	* English Language Arts	Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (Ac/H) TRAINED	*Math	Algebra I B/Algebra Enhancement Geometry (Ac) Algebra II (Ac/H) TRAINED	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics PreCalculus (Ac/H) TRAINED	*Math	Geometry College Algebra Statistics PreCalculus (Ac/H) Honors Calculus (H) **AP Calculus AB, BC **AP Statistics TRAINED
*Science	Environmental Science Biology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II TRAINED	*Science	**AP Biology Chemistry Zoology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II TRAINED	*Science	**AP Chemistry **AP Environmental Science Physics Earth Science or General Physical Science Human Anatomy Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II TRAINED	*Science	**AP Physics Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II TRAINED
*Social Studies	**AP Human Geography	*Social Studies	Civics or **AP US Government	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP world History
*PE/PE	Health/Finance A					PE/PE	Health/Finance B
(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 Honors French IV/AP Honors German IV/AP
		AP Seminar Grade 10	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	AP Research Grade 11,12	Prerequisite: AP Seminar
<p style="text-align: center;">Courses above are graduation requirements (*) and/or recommended (R) for this Pathway **Elective course for this pathway</p>							

HUMAN SERVICES PATHWAY

This sample 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 Owning Your Own Business Aging Adults Child Development Family & Social Services Food Preparation Teaching Counseling	Organize Well Plan and Direct Programs Be Creative Communicate Well Assume Leadership Work with a Team Use Interpersonal Skills Be Conscientious and Dependable Plan Budgets	Communication Services Helping and Protecting Others Working with People Counseling and Advising People Serving Others' Needs Interviewing People Selling Products and Services 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) Cosmetics Representative (CPC) Dry Cleaning Operator (CPC) Home Health Aide (CPC) Library Assistant (E) Armed Services Career (LPG) Bailiff (LPG) Postal Services Worker (LPG) Security Guard (LPG) Utility Worker (LPG) Aerobics Instructor (HT) Travel Agent (HT) Waitress (HT) Teacher's Assistant (C) Home Care Aide (CPC)	Barber (CPC) Cosmetologist (CPC) Fashion Designer (CPC) Manicurist (CPC) Massage Therapist (CPC) Mortician (CPC) Truck Driver (CPC) Teacher's Aide (E) Armed Services Career (LPG) Crime Lab Technician (LPG) Fire Fighter (LPG) Bartender (HT) Chauffeur (HT) Flight Attendant (HT) Meat Cutter (HT) Personal Trainer (CPC) Postmaster (LPG) Chef (HT) Baker (HT)	Funeral Director (CPC) Marriage & Family Therapist (CPC) College Professor (E) Principal (E) Teacher (E) City Manager (LPG) Criminologist (LPG) FBI Agent (LPG) Lawyer (LPG) Parole Officer (LPG) Mental Health Counselor (CPC) Park Ranger (LPG) Workforce Director (LPG) Athletic Agent (HT) Executive Chef (HT) Family Planner (HT) Food Services Manager (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 sample 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.

9th		10th		11th		12th	
* English Language Arts	Academic or Honors 9 Digital Journalism I	* English Language Arts	Academic or Honors 10 Digital Journalism I & II	* English Language Arts	Academic or Honors 11 AP Language & Comp Digital Journalism I, II & III	* English Language Arts	Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp Digital Journalism I, II & III
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H) TRAINED	*Math	Algebra I B/Algebra Enhancement Geometry (Ac) Algebra II (Ac/H) TRAINED	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Pre-Calculus(Ac/H) TRAINED	*Math	Geometry College Algebra Statistics Pre-Calculus(Ac/H) Honors Calculus (H) **AP Calculus AB, BC **AP Statistics TRAINED
*Science	Environmental Science Biology Intro to STEM TRAINED	*Science	**AP Biology Chemistry Zoology Intro to STEM TRAINED	*Science	**AP Chemistry **AP Environmental Science Physics Earth Science or General Physical Science Human Anatomy Intro to STEM TRAINED	*Science	**AP Physics **AP Biology **AP Chemistry Intro to STEM TRAINED
*Social Studies	**AP Human Geography	*Social Studies	Civics or **AP US Government	*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
*PE/PE	Health/Finance A	**Introduction to CAD **Design and Problem Solving		**Introduction to CAD **Manufacturing Technology		*PE/PE	Health/Finance B
(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 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 Seminar and AP Research	Prerequisite AP Seminar	AP Research	Prerequisite AP Seminar
<p style="text-align: center;">Courses above are graduation requirements (*) and/or recommended (R) for this Pathway **Elective course for this pathway</p>							

SCIENCE AND HEALTH (SH) PATHWAY

This sample 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 Science and Medicine Medical Research Food Production Environment & Conservation Pharmacy Physical Therapy Sports/Fitness Information Systems Conservation Radiology	Pay attention to detail Use a computer and technology Work in a lab setting or medical facility Apply a scientific theory to real-life problems Work outdoors around animals and plants Collect and analyze data from experiments Work with people in need Work with science and math theories	Diagnosing and caring for sick animals Working outdoors with wildlife Solving problems Working on cutting-edge scientific research Working with a team Medical lab research Contributing to society Working with numbers Developing conclusions from a 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

Health Science (HS)

Agriculture, Food & Natural Resources (AFN)

Science, Technology and Engineering Math (STEM)

SAMPLE CAREERS

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

SCIENCE AND HEALTH COURSE OF STUDY

This sample 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 th		10 th		11 th		12 th	
* English Language Arts	Academic or Honors 9 Digital Journalism I	* English Language Arts	Academic or Honors 10 Digital Journalism I & II	* English Language Arts	Academic or Honors 11 AP Language & Comp Digital Journalism I, II & III	* English Language Arts	Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp Digital Journalism I, II & III
*Math	Algebra I A Algebra I (Ac) Geometry (Ac/H) TRAINED	*Math	Algebra IB/Algebra Enhancement Geometry (Ac) Algebra II (Ac/H) TRAINED	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Pre-Calculus(Ac/H) TRAINED	*Math	Geometry College Algebra Statistics Pre-Calculus (Ac/H) Honors Calculus (H) **AP Calculus AB, BC **AP Statistics TRAINED
*Science	Environmental Science Biology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I TRAINED	*Science	**AP Biology Biology Chemistry Zoology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II TRAINED	*Science	**AP Chemistry **AP Environmental Science Physics Earth Science or General Physical Science Human Anatomy Intro to STEM Intro to Engineering Design I/II Aviation STEM Principles of Engineering I/II TRAINED	*Science	**AP Physics **AP Biology **AP Chemistry Intro to STEM Intro to Engineering Design I/II Aviation STEM Principles of Engineering I/II TRAINED
*Social Studies	AP Human Geography	*Social Studies	Civics or **AP US Government	*Social Studies	Modern US History or AP US History	*Social Studies	World History or AP European History or AP World History
*PE/PE	Health/Finance A	Health Emergencies Fitness/Sport Nutrition & Physiology Healthy Lifestyle Management Movement & Sport Related Fitness Strength and Conditioning Wellness and Fitness Mindful Moments I and II		Health Emergencies Fitness/Sport Nutrition & Physiology Healthy Lifestyle Management Movement & Sport Related Fitness Strength and Conditioning Wellness and Fitness Mindful Moments I and II		PE/PE	Health/Finance B
(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 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	AP Research	Perquisite AP Seminar

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

ADVANCED PLACEMENT CAPSTONE COURSES

AP Capstone™ 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™ or the AP Seminar and Research Certificate™

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™.

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™.

The College Board developed the AP Capstone Diploma™ 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 (NCAA)

1.0 Credit

Grade 10, 11

Prerequisite: Students who successfully complete AP Human Geography in the 9th 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.

AP Research (NCAA)

1.0 Credit

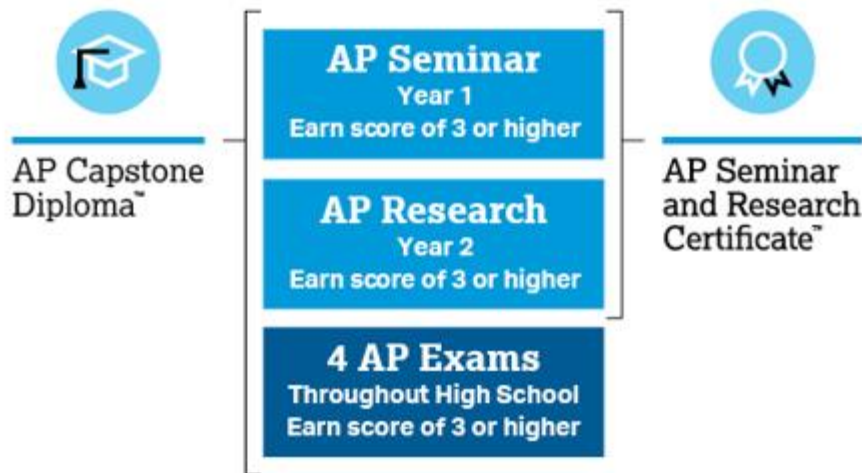
Grade 11, 12

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 school-based 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 III (EHS)	10,11,12	Ceramics I, II
Drawing I	9, 10, 11, 12	No Prerequisite
Drawing II	9, 10, 11, 12	Drawing I
Painting I	9, 10, 11, 12	No Prerequisite
Painting II	10, 11, 12	Painting I
Studio Art I	9, 10, 11, 12	No 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 teacher recommendation
Art Exploration through STEAM	9, 10, 11,12	No Prerequisites
AP Studio Art: 2-D Design (STEAM)	11, 12	Art teacher recommendation; Drawing I, and one other art elective
AP Studio Art: 3-D Design (STEAM)	11, 12	Art teacher recommendation, Ceramics I, and one of the following: Ceramics II, Ceramics I, Studio Art I, Studio Art II, Creative Fashion I, Creative Fashion II
AP Art History	11, 12	Social Studies or ELA teacher recommendation
AP Drawing	11, 12	Drawing I, and one other Art Elective
Digital Journalism I	9, 10, 11, 12	Recommendation from an ELA, Technology or Art teacher is required
Digital Journalism II	10, 11, 12	Digital Journalism I
Digital Journalism III	11, 12	Digital Journalism II

CERAMICS I



Grades 9,10, 11, 12

.50 credit

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

.50 credit

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



Grades 9,10, 11, 12

.50 credit

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.

PAINTING I



Grades 9,10, 11, 12

.50 credit

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

.50 credit

The Studio Art I course offers students the opportunity for creative experiences in two-dimensional and three-dimensional 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

.50 credit

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

.50 credit

Requirement: Students should have access to a digital camera with a 24.2Mega 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)

Prerequisite: completed three or more art courses and teacher recommendation

.50 credit

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

.50 credit

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 other art elective.

1.0 credit

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

1.0 credit

Prerequisite: Art teacher recommendation; Drawing I and one other art elective.

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

1.0 credit

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.

DIGITAL JOURNALISM I



Grades 9, 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.

DIGITAL JOURNALISM II



Grades 10, 11, 12

1.0 credit

Prerequisite: Digital Journalism I

Digital Journalism II is an advanced course for students who have completed Digital Journalism I. This is a continuation of Digital Journalism I for students who demonstrated proficiency in the skills introduced in that course. The course emphasizes leadership, collaboration, and advanced skills learned in Digital Journalism I.

DIGITAL JOURNALISM III

Grades 11, 12

Prerequisite: Digital Journalism II

1.0 credit

Digital Journalism III is designed for students who have successfully completed Digital Journalism I and II and have demonstrated exceptional proficiency in both technical skills and collaborative leadership. This course is a significant continuation, shifting the focus from advanced skill acquisition (Digital Journalism II) to the application and leadership of those skills in a real-world, highly independent, and complex journalistic production environment.

BUSINESS & TECHNOLOGY

The Business and Technology Department is committed to preparing our students for leadership positions in the 21st century. Our goal is to provide a broad business background, entrepreneurial zeal, up-to-date technology opportunities.

BUSINESS COURSES

Course	Grade(s)	Prerequisites
Personal Finance A (required course)	9	No Prerequisite
Personal Finance B (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
Accounting I	9, 10, 11, 12	No Prerequisite
Accounting II	10, 11, 12	Accounting I
Sports Marketing	9, 10, 11, 12	No Prerequisite

PERSONAL FINANCE A



Grade 9 (graduation requirement)

.25 credit

This introductory Personal Finance course teaches the basic skills needed to manage money effectively, including understanding income, spending, and saving. The course helps individuals develop practical financial skills for everyday life and builds knowledge in personal finance fundamentals and money management. Financial literacy is essential for achieving long-term success and financial stability.

PERSONAL FINANCE B



Grade 12 (graduation requirement)

.25 credit

Personal Finance focuses on essential financial skills for managing income, spending, saving, investing, risk, insurance, and credit. It teaches individuals how to budget, plan, and make informed financial decisions for stability and success. Key areas include understanding personal finance fundamentals, managing income and expenses, saving for the future, investing wisely, protecting assets through insurance, and maintaining good credit. The goal is to equip individuals with the knowledge to achieve financial independence and security.

INTRODUCTION TO BUSINESS



Grade 9, 10, 11, 12

.50 credit

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



Grade 9, 10, 11, 12

.50 credit

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



Grade 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.

ACCOUNTING I



Grade 9, 10, 11, 12

.50 credit

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



Grade 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 MARKETING



Grade 9, 10, 11, 12

.50 credit

Sports marketing professionals work with sporting organizations, 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.

TECHNOLOGY COURSES

Course	Grade(s)	Prerequisites
Web Design (WHS only)	9, 10, 11, 12	
2D Animation	9, 10, 11, 12	
3D Animation (WHS only)	9, 10, 11, 12	
Video Production (WHS)	10, 11, 12	
Video & Music Production (EHS)	11, 12	
Graphic Design	10, 11, 12	
Digital Advertising (WHS)	10, 11, 12	
Digital Journalism I	9, 10, 11, 12	Teacher recommendation from an ELA, Technology, or Art teacher
Digital Journalism II	10, 11, 12	Digital Journalism I
Digital Journalism III	11,12	Digital Journalism II
Yearbook I	10, 11, 12	Previous ELA teacher's recommendation required
Yearbook II	11, 12	Yearbook I
Beyond the Controller: Level I	9, 10, 11, 12	Successful competition of Algebra I

Beyond the Controller: Level II (EHS only)	9, 10, 11, 12	Successful Completion of Beyond the Controller I with a grade of 80% or higher
TRAINED for the Future (Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones)	9, 10, 11, 12	
TRAINED 2: Applied Systems and Designs (WHS Only)	10, 11, 12	Trained for the Future
Fundamentals of Cyber Security (EHS)	9, 10, 11, 12	

WEB DESIGN (WHS)



Grade 9, 10, 11, 12

.50 credit

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 Websites today. This course is a must to prepare students for any field in today's world.

2D ANIMATION



Grade 9, 10, 11, 12

.50 credit

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)



Grade 9, 10, 11, 12

.50 credit

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)



Grade 10, 11, 12

.50 credit

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)



Grade 11, 12

1.0 credit

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 & Technology departments.

GRAPHIC DESIGN (WHS)



Grade 10, 11, 12

.50 credit

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)



Grade 10, 11, 12

.50 credit

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)



Grade 10, 11, 12

.50 credit

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 I



Grade 9, 10, 11, 12

1.0 credit

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, and digital publishing.

DIGITAL JOURNALISM II



Grade 10, 11, 12

1.0 credit

Prerequisite: Digital Journalism I

Digital Journalism II is an advanced course for students who have completed Digital Journalism I. This is a continuation of Digital Journalism I for students who demonstrated proficiency in the skills introduced in that course. The course emphasizes leadership, collaboration, and advanced skills learned in Digital Journalism I.

DIGITAL JOURNALISM III

Grade 11, 12

1.0 credit

Digital Journalism III is designed for students who have successfully completed Digital Journalism I and II and have demonstrated exceptional proficiency in both technical skills and collaborative leadership. This course is a significant continuation, shifting the focus from advanced skill acquisition (Digital Journalism II) to the application and leadership of those skills in a real-world, highly independent, and complex journalistic production environment.

YEARBOOK I



Grade 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; develops students' skills in writing and editing stories, headlines and captions; and teaches students the principles of production design, layout and printing. Photography, photojournalism, and digital technology skills will be included.

YEARBOOK II



Grade 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.

BEYOND THE CONTROLLER: LEVEL I (EHS only)



Grade 9, 10, 11, 12

.50 credit

Prerequisite: Successful Completion of Algebra I

Coursework will explore topics related to eGaming pertaining to code of conduct, ethical modeling, coding, programming, conflict resolution, management skills, content creation, critical thinking, problem solving skills,

event management and production, leadership, motivation, marketing, mindfulness, peer-mentoring, specialized coaching, personal assessment and development, social media, streaming, supporter engagement and statistical analytics.



BEYOND THE CONTROLLER: LEVEL II

Grade 9, 10, 11, 12

.50 credit

Prerequisite: Successful Completion of Beyond the Controller I with a grade of 80% or above

This Level II course builds on the functional knowledge gained in Beyond the Controller Level I. Students will explore eGaming and dive deeper into the complexities of the industry, focusing on both the technical and interpersonal aspects that shape successful gaming environments. This level II course will allow students a more in-depth hands-on experience modeling the concepts learned in Level I. Students will research and model areas of interest in the eGaming industry.



TRAINED FOR THE FUTURE

(Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones)

Grade 9, 10, 11, 12

.50 credit

This course will provide hands-on, in-depth exploration of key technologies shaping the future. Students will dive into the fundamentals of robotics, artificial intelligence, networking, engineering, 3D printing, and drones gaining a foundation in each area. Students will discover the world of unmanned aerial vehicles, from their design and operation to practical applications in industries such as surveying, delivery, and agriculture. Students will program and troubleshoot simple drones while grasping the fundamentals of electrical, mechanical, and systems engineering as they apply to building technological devices. By the end of the course students will have developed a comprehensive understanding of these interconnected fields and be prepared for further study in technology or engineering.



TRAINED 2: APPLIED SYSTEMS AND DESIGN (WHS only)

Grades 10,11,12

.50 credit

Prerequisite: Trained for the Future

This advanced, project-based course moves beyond exploration and into application and integration. Students will function as a high-tech design team, applying the foundational knowledge gained in “**TRAINED** for the Future” to solve complex, real-world challenges. Instead of studying each topic in isolation, students will synthesize robotics, artificial intelligence, networking, and engineering principles in long-term projects.

FUNDAMENTALS OF CYBERSECURITY (EHS ONLY)

Grades 9, 10,11,12

.50 credit

In this Fundamentals of cybersecurity course, students will gain an understanding of basic cybersecurity concepts including the inner workings of computer hardware, software and networks. Students will explore the concepts of encryption and cryptography and investigate strategies to identify and protect against security threats such as hackers and network attacks. The course does not require any prerequisites knowledge in computing or cybersecurity but does assume an interest in learning about computer network security and possible career in cybersecurity.

INFORMATION TECHNOLOGY

Courses	Grade(s)	Prerequisites
Introduction to Python Programming	9, 10, 11, 12	
*Introduction to Java Programming	9, 10, 11, 12	
*C++ Programming	10, 11, 12	
*Advanced Java Programming	10, 11, 12	
*AP Computer Science Principles	11, 12	Introduction to Java or Introduction to Python
*AP Computer Science A Java	11, 12	Introduction to Java and Advanced Java or Teacher Recommendation

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.

INTRODUCTION TO PYTHON PROGRAMMING



Grade 9, 10, 11, 12

.50 credit

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



Grade 9, 10, 11, 12

.50 credit

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).

*C++ PROGRAMMING



Grade 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 C++ language.

*ADVANCED JAVA PROGRAMMING



Grade 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 (NCAA)



Grade 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) (NCAA)



Grade 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. This course covers such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.

ENGLISH LANGUAGE ARTS (ELA)

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



Grade 9, 10, 11, 12

1.0 credit

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



Grade 9, 10

.50 credit

Prerequisite for admission to Elements of Literacy - Students are selected based upon teacher recommendation and assessment results. Students in 10th grade who are also enrolled in Algebra Enhancement will be placed into an Enhancement period which includes Algebra Enhancement and ELA Enhancement (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 9A/10A for the fall semester (.50 credit). Students who do not test out of Elements of Literacy 9A/10A after the fall semester will be placed into Elements of Literacy 9B/10B 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 9B/10B added to their schedule for the spring semester. Elements of Literacy will serve as a mandatory elective.**

KEYSTONE LITERATURE TUTORIAL



Grade 11, 12

.50 credit

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

Introduction to Literature improves students' 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)



1.0 credit

Prerequisites: Previous ELA teacher's assessment and Teacher and Administrator Recommendation

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 Teacher and Administrator Recommendation



1.0 credit

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)



1.0 credit

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, (12th 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)



1.0 credit

Prerequisite: Previous ELA teacher's assessment and Teacher and Administrator Recommendation

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)



1.0 credit

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)



1.0 credit

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 (multi-genre 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.

HONORS ELA 12: World Literature and Composition (NCAA)



1.0 credit

Prerequisite: Previous ELA teacher's assessment and Teacher and Administrator Recommendation

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 assessment, recommendation, and successful completion of Honors ELA 11
Epic Tales and Timeless Heroes: Uncovering Myths in Modern Media	9, 10, 11, 12	No Prerequisite
Novel to Film	11, 12	No Prerequisite
Writer's Workshop I	9, 10, 11, 12	No Prerequisite
Writer's Workshop II	10, 11, 12	Writer's Workshop I
Yearbook I	10, 11, 12	Previous ELA teacher's recommendation required
Yearbook II	11, 12	Yearbook I
Intro to Theater Arts	9, 10, 11, 12	No Prerequisite
Advanced Theater Arts	9, 10, 11, 12	Intro to Theater Arts
Digital Journalism I	9, 10, 11, 12	Recommendation from an ELA, Technology, or Art teacher is required
Digital Journalism II	10, 11, 12	Digital Journalism I
Digital Journalism III	11, 12	Digital Journalism II
Tabletop Role-Playing Game (TTRPG) Creative Writing (WHS only)	9, 10, 11, 12	No Prerequisite
Panther Talk (WHS only)	9, 10, 11, 12	No Prerequisite

Truth Seekers: Mastering Media, Myths, and Misinformation	9, 10, 11, 12	No Prerequisite
Exploring Poetry: Forms, Themes, and Expressions (EHS only)	9, 10, 11, 12	

AP LANGUAGE AND COMPOSITION (NCAA)



Grade 12

1.0 credit

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.

NOVEL TO FILM



Grade 11, 12

.50 credit

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.

WRITER'S WORKSHOP I



Grade 9, 10, 11, 12

.50 credit

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



Grade 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



Grade 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; develops 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



Grade 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.

INTRO TO THEATER ARTS



Grade 9, 10, 11, 12

.50 credit

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



Grade 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 I



Grade 9, 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.

DIGITAL JOURNALISM II



Grade 10, 11, 12

1.0 credit

Prerequisite: Digital Journalism I

Digital Journalism II is an advanced course for students who have completed Digital Journalism I. This is a continuation of Digital Journalism I for students who demonstrated proficiency in the skills introduced in that course. The course emphasizes leadership, collaboration, and advanced skills learned in Digital Journalism I.

DIGITAL JOURNALISM III

Grade 11, 12

1.0 credit

Prerequisite: Digital Journalism II

Digital Journalism III is designed for students who have successfully completed Digital Journalism I and II and have demonstrated exceptional proficiency in both technical skills and collaborative leadership. This course is a significant continuation, shifting the focus from advanced skill acquisition (Digital Journalism II) to the application and leadership of those skills in a real-world, highly independent, and complex journalistic production environment.

EXPLORING POETRY: FORMS, THEMES, AND EXPRESSIONS (EHS only)

Grade 9, 10, 11, 12

.50 credit

This one-semester elective invites students to dive into the vibrant world of poetry. Through reading diverse published poems and analyzing music lyrics as contemporary poetry, students will explore how themes and emotions are powerfully conveyed through language. The course emphasizes both creative and analytical skills—students will craft their own original poems while studying various poetic forms, structures, and stylistic elements. By the end of the semester, learners will gain a deeper appreciation for poetry's rich expressive possibilities and develop their unique poetic voice.

PANTHER TALK (WHS)

.50 credit

Build confidence, think critically, and speak with impact! In this course, students practice informative, persuasive, and narrative speeches, explore current topics, and interpret prose and poetry. Hands-on activities such as discussions and impromptu speaking help students grow as confident speakers, presenters, and conversationalists—skills that will benefit them in school, careers, and everyday life.

TABLETOP ROLE-PLAYING GAME (TTRPG) CREATIVE WRITING (WHS only)

Grade 9, 10, 11, 12

.50 credit

In this course, students will learn both the historical and cultural impacts of high fantasy, science fiction, and collaborative storytelling through the use of various modular rulesets and existing game handbooks. Students will not only learn the history of these games and the mythology, but will also create their own. Students will practice their creative writing, figurative language, and collaboration skills while expanding their vocabulary and social skills through regular co-storytelling with their peers. Ultimately, they will present a final project intended to put their created games and challenges to the test with real players.

EPIC TALES AND TIMELESS HEROES: UNCOVERING MYTHS IN MODERN MEDIA

Grades: 9, 10, 11, 12 |

.50 credit

Heroes and monsters from world myths, legends, and fairy tales continue to captivate our imagination, reflecting timeless themes and emotions. Join us as we discover how these enduring narratives have shaped our culture and persist in the stories, films, music, and games we love today. We will explore ancient tales and their modern adaptations, examining how these classic stories evolve to address contemporary values and challenges through engaging discussions and creative projects. Let's uncover the power of storytelling and the lasting impact of the heroes whose tales still resonate with us!

TRUTH SEEKERS: MASTERING, MEDIA, MYTHS AND MISINFORMATION

Grade 9, 10, 11, 12 |

.50 credit

You'll uncover the secrets behind misinformation, examine the invisible patterns of search bias, and gain the skills to evaluate sources and claims like a pro.

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 Development II and min 80% grade in both and teacher recommendation
Foods and Nutrition	9, 10, 11, 12 (EHS) 10, 11, 12 (WHS)	No Prerequisite
Multicultural Foods	10, 11, 12	Successful completion of Foods and Nutrition with minimum grade of 80%

Baking and Pastry Arts	11, 12	Successful competition of Foods and Nutrition and Multicultural Foods with minimum grade of 80% in both
Creative Fashion I	9, 10, 11,12	No Prerequisite
Creative Fashion II	9,10, 11, 12	Creative -Fashion I

CREATIVE FASHION

There are two 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.



CREATIVE FASHION I

Grade 9, 10, 11, 12

.50 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

Grade 9, 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.**

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



Grade 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. Students taking Child Development I should possess good time management skills and initiative, as this is a hands-on, project-oriented course.

CHILD DEVELOPMENT II



Grade 11, 12

1.0 credit

Prerequisite: Teacher recommendation, 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



Grade 11, 12 (EHS Only)

1.0 credit

Prerequisite: Child Development I and Child Development II and min 80% grade in both

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.

FOODS AND NUTRITION



Grade 9, 10, 11, 12 (EHS), Grades 10, 11, 12 (WHS)

.50 credit

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.



MULTICULTURAL FOODS

Grade 9, 10, 11, 12

.50 credit

Prerequisite: Successful completion of Foods and Nutrition and a grade of 80%.

Foods and Nutrition 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 commonalities 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.



BAKING AND PASTRY ARTS

Grade 11, 12

.50 credit

Prerequisite: Successful completion of Multicultural Foods and a grade of 80%.

Students explore the art and science of baking, learning foundational and advanced pastry techniques through hands on labs, recipe analysis and creative projects. Emphasis is placed on precision, teamwork, presentation, sanitation and understanding ingredients chemical functions.

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 9th 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, childbirth, 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-to-date 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 decisions, achieving health literacy, adopting 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

Invasion Games

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

Net/Wall Games

Badminton
Pickleball
Table Tennis
Tennis
Volleyball

Adventure Activities

Cooperative Games/Activities
Hiking
Team Building Activities
Kin Ball

Target Games

Frisbee Golf
Bowling
Croquet
Golf
Archery
Bocce
Curling

Striking/Fielding Games

Wiffle Ball
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%
Mindful Moments	10, 11, 12	No prerequisites
Mindful Moments II	10,11,12	Prerequisite Mindful Moments

HEALTH ELECTIVES

HEALTHY LIFESTYLE MANAGEMENT



Grade 9, 10, 11, 12

.50 credit

The main focus of this course is changing the 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



Grade 10, 11, 12

.50 credit

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



Grade 10, 11, 12

.50 credit

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



Grade 10, 11, 12

.50 credit

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



Grade 10, 11, 12

.50 credit

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 co-educationally and include fitness, net/wall games, target games, invasion games, adventure activities, and striking and fielding games.

STRENGTH & CONDITIONING I



Grade 9, 10, 11, 12

.50 credit

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



Grade 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



Grade 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



Grade 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



Grade 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 snowshoeing, 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



Grade 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



Grade 9, 10, 11, 12

.50 credit

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



Grade 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

1.0 credit

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



Grade 10, 11, 12

.50 credit

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.

AQUATIC SPORT AND FITNESS I



Grade 9, 10, 11, 12

.50 credit

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



Grade 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



Grade 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.

MINDFUL MOMENTS



Grade 10, 11, 12

.50 credit

This course will encompass multiple areas of wellness including yoga, self-esteem, confidence and character building, nutrition, as well as aspects of physical fitness. Students will be equipped with tools and a variety of practices that foster physical health and mental wellness, in addition to providing an environment of peer-to-peer support and cooperative learning activities. The course will introduce both the benefits of Yoga poses, mindfulness and stress reduction activities. Yoga mats will be provided.

MINDFUL MOMENTS II



Grade 10, 11, 12

.50 credit

Mindful Moments II provides students with the opportunity to continue building on the mindfulness and movement practices they established in Mindful Moments. Through more advanced postures, breathing techniques and mindfulness practices, students will deepen their understanding of yoga and enhance their physical, mental, and emotional well-being. This course is designed to challenge students to explore new areas of their practice, increase flexibility and strength, and cultivate a greater sense of inner awareness and balance.

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 21st 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. The 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

Grade 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

1.0 credit

Prerequisite: Successful Completion of 8th Grade Algebra I and Teacher and Administrator Recommendation

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

1.0 credit

Prerequisite: Successful Completion of Academic Algebra I and Honors Geometry and Teacher and Administrator Recommendation

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 and Teacher and Administrator Recommendation

Honors Precalculus is an accelerated course which combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for Calculus. Honors 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 resolve vectors, use matrices and discover complex numbers are not too complex after all.

HONORS CALCULUS (NCAA)



Grade 12

1.0 credit

Prerequisite: Successful Completion of Precalculus and Teacher and Administrator Recommendation

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

1.0 credit

Prerequisite: Successful Completion of Honors Precalculus with a minimum final grade of 83%, OR Academic Precalculus with a minimum final grade of 93% and Teacher and Administrator Recommendation

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 Precalculus 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 Precalculus with a minimum final grade of 83%, and Teacher and Administrator Recommendation

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 11, 12

1.0 credit

Prerequisite: Successful completion of Honors/Academic Algebra II and Teacher and Administrator Recommendation

Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics introduces 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)



Grade 11, 12

1.0 credit

Prerequisite: Successful completion of Honors/Academic Algebra II and Teacher and Administrator Recommendation

Students who have completed Algebra II may take Statistics as their 11th or 12th 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 8th 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)

Grade 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 and Teacher and Administrator Recommendation

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)



Grade 11, 12

1.0 credit

Prerequisite: Successful Completion of Algebra I, Academic Geometry, Academic Algebra II and Teacher and Administrator Recommendation

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 Precalculus or college level math.

ACADEMIC PRECALCULUS (NCAA)



Grade 11, 12

1.0 credit

Prerequisite: Successful Completion of Academic Geometry AND Academic Algebra II and Teacher and Administrator Recommendation

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 Academic Precalculus, a student must successfully complete all outcomes for prerequisite courses.

STATISTICS (NCAA)



Grade 11, 12

1.0 credit

Prerequisite: Successful Completion of Honors/Academic Algebra II and Teacher and Administrator Recommendation

Students who have completed Algebra II may take Statistics in 11th or 12th 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)



Grade 11, 12

1.0 credit

Successful completion of Algebra II and Teacher and Administrator Recommendation

This course will be offered to 11th or 12th 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 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

Prerequisite: Successful Completion of 8th Grade Essentials of Algebra

1.0 credit



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 real-life 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 (.50 credit for NCAA)

Grade 10

Prerequisite: Successful Completion of Algebra IA and Teacher and Administrator Recommendation

1.0 credit



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 ENHANCEMENT

Grade 10

Prerequisite: This course is to be taken along with Algebra IB and Teacher and Administrator Recommendation

.50 credit



Algebra 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

1.0 credit

Successful completion of Algebra II and Teacher and Administrator Recommendation

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

1.0 credit

Prerequisite: Successful Completion of Algebra IA/Algebra IB and Teacher and Administrator Recommendation

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
*Introduction to Java Programming	9, 10, 11, 12	
*C++ Programming	10, 11, 12	
*Advanced Java Programming	10, 11, 12	
*AP Computer Science Principles	11, 12	Computer Science Fundamentals, Introduction to Java or Introduction to Python
*AP Computer Science A Java	11, 12	Introduction to Java and Advanced Java or Teacher Recommendation
Beyond the Controller: Level I	9, 10, 11, 12	Successful completion of Algebra I
Beyond the Controller: Level II (EHS only)	9, 10, 11, 12	Beyond the Controller: Level I
Statistics	11, 12	Successful Completion of Honors/Academic Algebra II and Teacher and Administrator Recommendation
AP Statistics	11, 12	Successful Completion of Honors/Academic Algebra II and Teacher and Administrator Recommendation
Honors Calculus	12	Prerequisite: Successful Completion of Precalculus and Teacher and Administrator Recommendation

AP Calc AB	12	Prerequisite: Successful Completion of Honors Precalculus with a minimum final grade of 83%, OR Academic Precalculus with a minimum final grade of 93% and Teacher and Administrator Recommendation
AP Calc BC	12	Prerequisite: Successful completion of Honors Precalculus with a minimum final grade of 83%, and Teacher and Administrator Recommendation
TRAINED (Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones) for the future	9, 10, 11, 12	
TRAINED 2: Applied Systems & Design (WHS only)	10, 11, 12	TRAINED for the Future

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

***INTRODUCTION TO JAVA PROGRAMMING**



Grade 9, 10, 11, 12

.50 credit

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).

***C++ PROGRAMMING**



Grade 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 C++ language.

***ADVANCED JAVA PROGRAMMING**



Grade 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 (NCAA)**



Grade 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, 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) (NCAA)**



Grade 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.

BEYOND THE CONTROLLER: LEVEL I



Grade 9, 10, 11, 12

.50 credit

Prerequisite: Successful Completion of Algebra I

Coursework will explore topics related to eGaming pertaining to code of conduct, ethical modeling, coding, programming, conflict resolution, management skills, content creation, critical thinking, problem solving skills, event management and production, leadership, motivation, marketing, mindfulness, peer-mentoring, specialized coaching, personal assessment and development, social media, streaming, supporter engagement and statistical analytics.

BEYOND THE CONTROLLER: LEVEL II (EHS only)



Grade 9, 10, 11, 12

.50 credit

Prerequisite: Successful Completion of Beyond the Controller I with a grade of 80% or above

This Level II course builds on the functional knowledge gained in Beyond the Controller Level I. Students will explore eGaming and dive deeper into the complexities of the industry, focusing on both the technical and interpersonal aspects that shape successful gaming environments. This Level II course will allow students a more in-depth hands-on experience modeling the concepts learned in Level I. Students will research and model areas of interest in the eGaming industry.

TRAINED FOR THE FUTURE

(Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones)

Grade 9, 10, 11, 12

.50 credit

This course will provide hands-on, in-depth exploration of key technologies shaping the future. Students will dive into the fundamentals of robotics, artificial intelligence, networking, engineering, 3D printing, and drones gaining a foundation in each area. Students will discover the world of unmanned aerial vehicles, from their design and operation to practical applications in industries such as surveying, delivery, and agriculture. Students will program and troubleshoot simple drones while grasping the fundamentals of electrical, mechanical, and systems engineering as they apply to building technological devices. By the end of the course students will have developed a comprehensive understanding of these interconnected fields and be prepared for further study in technology or engineering.

TRAINED 2: APPLIED SYSTEMS AND DESIGN(WHS only)

Grades 10,11,12

Prerequisite: Trained for the Future

.50 credit

This advanced, project-based course moves beyond exploration and into application and integration. Students will function as a high-tech design team, applying the foundational knowledge gained in "**TRAINED** for the Future" to solve complex, real-world challenges. Instead of studying each topic in isolation, students will synthesize robotics, artificial intelligence, networking, and engineering principles in long-term projects.

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)

Grade 9, 10, 11, 12

1.0 credit

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)



Grade 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.

HONORS WIND ENSEMBLE (EHS only)



Grade 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. The Honors Wind Ensemble is designed for students who consistently demonstrate high interest and achievement in Concert Band. In addition to participating in all Concert Band performances, the Honors Wind Ensemble 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 Wind Ensemble, 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 repertoire- ex. District Band solos) on their primary instrument. Students are encouraged to audition for PMEA District 10 Band, which will excuse students from quarterly band assessments.

CONCERT CHOIR (EHS only)



Grade 9, 10, 11, 12

1.0 credit

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)



Grade 9, 10, 11, 12

1.0 credit

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)



Grade 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.

HONORS DIVISI CHOIR (EHS only)



Grade 9, 10, 11, 12

1.0 credit

Prerequisite: Audition and pretest by Choral Director.

Divisi Choir is an honors level 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 is open to all students in grades nine through twelve, by audition and pretest to determine sufficient proficiency in singing and music reading skills.

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, choral festivals, and competitions. Students interested in joining should contact the chorus teacher. Auditions are held the previous spring during scheduling.

As a member of the Honors Divisi Choir, students will be required to audition for PMEA District 10 Chorus and/or perform at two community performances per semester.

COMBINED DIVISI CHOIR /WIND ENSEMBLE (EHS only)



Grade 9, 10, 11, 12

1.0 credit

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.

COMBINED HONORS DIVISI CHOIR /WIND ENSEMBLE (EHS only)

Grade 9, 10, 11, 12



1.0 credit

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

ROCK MUSIC ESSENTIALS (EHS Only)



Grade 9, 10, 11, 12

1.0 credit

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

Rock Music Essentials 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 elective is designed to meet the needs of students in grades 9-12 who are interested in understanding and performing blues and rock music and who already play electric guitar, electric bass, drums, or keyboard. The class meets 57 minutes per day for 180 days. Once prepared, the group will perform at venues at school and in public.

MODERN ACAPELLA (EHS only)



Grade 10, 11, 12

1.0 credit

Prerequisite: Audition and approval of the High School Choral Director; One year in High School Choir and proficient in performing as a soloist or small group.

Modern Acapella provides a creative outlet for students who excel in singing and can perform as a soloist and in an ensemble. The course will focus on advanced literature in pop, jazz, rock, and modern acapella music using the voice in innovative ways. Each student will be responsible to hold their own notes and only rely on themselves to form a small modern acapella ensemble. This course allows vocally advanced students to perform regularly for the community, while advancing stage presence.

COMBINED ROCK MUSIC ESSENTIALS/MODERN ACAPELLA (EHS only)



Grade 10, 11, 12

1.0 credit

This course is designed for those who wish to participate in both Modern Acapella and Rock Music Fundamentals. Refer to Rock Music Fundamentals and Modern Acapella course descriptions.

CONCERT BAND (WHS only)



Grade 9, 10, 11, 12

1.0 credit

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

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)



Grade 10, 11, 12

1.0 credit

Prerequisite: Participation in 9th, 10th, or 11th Grade Concert Band the previous year or an audition and/or approval by the 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 repertoire-ex. District Band solos) on their primary instrument and audition for the PMEA District 10 Band in December.

CONCERT CHOIR (WHS only)



Grade 9, 10, 11, 12

1.0 credit

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.

HONORS CONCERT CHOIR (WHS only)



Grade 10, 11, 12

1.0 credit

Prerequisite: Participation in 9th, 10th, or 11th Grade Concert Choir the previous year or an audition and/or approval by the High School Choral Director.

The Honors Concert Choir is designed for students who consistently demonstrate high interest and achievement in Concert Choir. The Honors Concert Choir will rehearse during the same class period as Concert Choir and will participate in all of the same performances.

In addition to participating in all Concert Choir performances, the Honors Concert Choir students will participate in extra music activities such as PMEA District 10 Choir auditions and other honors festivals. Students will be required to learn one piece in their primary voice part and audition for the PMEA District 10 Chorus in October.

COMBINED CONCERT BAND/CHOIR (WHS only)

Grade 9, 10, 11, 12



1.0 credit

Refer to Concert Band/Choir Descriptions.

PIANO SKILLS I

Grade 9, 10, 11, 12



.50 credit

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

Grade 10, 11, 12

Prerequisite: Piano Skills I



.50 credit

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

Grade 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.



.50 credit

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

Grade 10, 11, 12

Prerequisite: Teacher recommendation, Music Theory I



1.0 credit

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)



Grade 11, 12

1.0 credit

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.

MUSIC PRODUCTION (WHS only)



Grade 10, 11, 12

.50 credit

Students enrolled in Music Production will delve into the realm of music creation through studies in musical composition, digital audio mixing software, composition software, and audio engineering techniques. Each unit in this course will afford hands-on music making experiences that students can apply to their technical and creative tool kit. At the conclusion of this course, each student will have the ability to call themselves a digital composer with their learned skill culminating in original song work they can share.

INTRO TO THEATER ARTS



Grade 9, 10, 11, 12

.50 credit

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



Grade 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.

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

Grade 10, 11



.50 credit

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



1.0 credit

Prerequisite: Teacher and Administrator Recommendation

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. Honors Biology integrates labs and activities into core classroom instruction. ****Note: All students enrolled in this course are required to take the Keystone Exam.***

HONORS CHEMISTRY (NCAA)

Grade 10



1.0 credit

Prerequisite: Biology and Teacher and Administrator Recommendation

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 VSEPR theory, net ionics, oxidation/reduction reactions, and organic chemistry. Honors Chemistry integrates labs and activities into core classroom instruction.

HONORS EARTH SCIENCE (NCAA)



Grade 11

1.0 credit

Prerequisite: General Physical Science or Chemistry, and Teacher and Administrator Recommendation

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 Earth Science integrates labs and activities into core classroom instruction.

HONORS PHYSICS (NCAA)



Grade 11

1.0 credit

Prerequisite: Biology, Honors Chemistry, Algebra I, Geometry, Algebra II, Precalculus (may be taken concurrently) and Teacher and Administrator Recommendation

Honors Physics provides instruction in laws of conservation, kinematics; Newton's Laws of Motion, 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. Honors Physics integrates labs and activities into core classroom instruction.

ADVANCED PLACEMENT (AP) SCIENCE COURSES (ELECTIVE OFFERINGS)

AP BIOLOGY (NCAA)



Grade 10, 11, 12

1.0 credit

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 and Teacher and Administrator Recommendation

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)



Grade 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 and Teacher and Administrator Recommendation

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 ENVIRONMENTAL SCIENCE (NCAA)



Grade 10, 11, 12

1.0 credit

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 should have successfully passed a level of Algebra I. Students taking AP Environmental Science should have completed or should be concurrently taking Chemistry and Teacher and Administrator Recommendation

Adhering to the curricula required by the College Board and designed to parallel college level introductory environmental science courses, AP Environmental Science is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world by requiring that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. This course covers the 4 Big Ideas: energy transfers, interactions between earth systems, interactions between different species and environment, and sustainability. AP Environmental Science includes college level, inquiry-based laboratory experiments.

AP PHYSICS (NCAA)



Grade 12

1.0 credit

Prerequisite: Honors Physics with a minimum final grade of 83%, Physics with a minimum final grade of 93% or successful completion of an AP course, Calculus (may be taken concurrently) and Teacher and Administrator Recommendation

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. AP Physics integrates labs and activities into core classroom instruction as designated by the College Board.

ACADEMIC PROGRAM

BIOLOGY (NCAA)



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. Biology integrates labs and activities into core classroom instruction.

****Note: All students enrolled in this course are required to take the Keystone Exam.***

CHEMISTRY (NCAA)



Grade 10

1.0 credit

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. Chemistry integrates labs and activities into core classroom instruction.

EARTH SCIENCE (NCAA)

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. Earth Science integrates labs and activities into core classroom instruction.

PHYSICS (NCAA)

Grade 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. Physics integrates labs and activities into core classroom instruction.

CORE PROGRAM

ENVIRONMENTAL SCIENCE (NCAA)

Grade 9 - *Preacquisition Teacher and Administrator Recommendation*

1.0 credit

Environmental 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.

Environmental Science will explore the relationship between humans and the natural world. Students will investigate ecological systems, energy flow, biodiversity, natural resources and agricultural and environmental sustainability. In addition, life science (Biology) principles will be introduced 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 Environmental Science may include Earth Science, Physical Science, (Chemistry and Physics) and Biology. Environmental Science integrates labs and activities into core classroom instruction.

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. Biology integrates labs and activities into core classroom instruction.

****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

1.0 credit

Prerequisite: 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	No Prerequisite
Introduction to Engineering Design II	9, 10, 11, 12	Successful completion of Introduction to Engineering I Design I
Principles of Engineering I	10, 11, 12	Successful completion of Introduction to Engineering Design I OR Successful Completion of Academic Algebra I or Algebra IB AND concurrently taking Geometry. Strong math applications and background are necessary for this course
Principles of Engineering II	10, 11, 12	Successful completion of Principles of Engineering I
Aviation STEM	9, 10, 11, 12	No Prerequisite
TRAINED (Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones) for the future	9,10,11,12	
TRAINED 2: Applied Systems & Design (WHS only)	10, 11,12	TRAINED for the future
Physics	12	Prerequisite: Chemistry, Geometry, Algebra II (may be enrolled concurrently)
AP Biology	10, 11, 12	See Prerequisites in course description
AP Chemistry	11, 12	See Prerequisites in course description
AP Environmental Science	10,11,12	See Prerequisites in course description
AP Physics	12	See Prerequisites in course description

ASTRONOMY I



Grade 9, 10, 11, 12

.50 credit

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

ASTRONOMY II



Grade 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



Grade 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



Grade 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)



Grade 10, 11, 12

1.0 credit

Prerequisite: Biology

This science course will introduce students to in-depth study of the human body and incorporate activities that prepare students who are interested in science, health, and/or medicine for college or a career in a related field. Students will study anatomical terminology, tissues and functions of organ systems including the skeletal, muscular, nervous, endocrine, digestive, cardiovascular, respiratory, and lymphatic systems.

FORENSIC SCIENCE I (STEM)



Grade 9, 10, 11, 12

.50 credit

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.

FORENSIC SCIENCE II (STEM)



Grade 9, 10, 11, 12

Prerequisite: Forensic Science I

.50 credit

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)



Grade 10, 11, 12

Prerequisite: Biology

1.0 credit

Zoology is an elective course that gives students the opportunity to further their understanding of the biological world through a comprehensive study of animals. Emphasis is placed on the development of an understanding of the animal kingdom from several perspectives, including classification, behavior, evolution and anatomy and physiology. This course is highly recommended for students wanting to pursue a college degree or a career in the biological sciences, especially as a veterinarian or in the animal sciences.

INTRODUCTION TO STEM (STEM)



Grade 9, 10, 11, 12

.50 credit

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)



Grade 9, 10, 11, 12

.50 credit

Students will dig deep in the 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, 3D printing and using an engineering notebook to document their work. A strong mathematics background and/or interest is needed for this course.

INTRODUCTION TO ENGINEERING DESIGN II (STEM)



Grade 9, 10, 11, 12

Prerequisite: Successful completion of Introduction to Engineering Design I

.50 credit

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)



Grade 10, 11, 12

.50 credit

Prerequisite: Successful Completion of Introduction to Engineering Design I 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)



Grade 10, 11, 12

.50 credit

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.

AVIATION STEM



Grade 9, 10, 11, 12

.50 credit

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.

TRAINED FOR THE FUTURE



(Technology, Robotics, AI, Informational Technology, Networking, Engineering, and Drones)

Grade 9, 10, 11, 12

.50 credit

This course will provide hands-on, in-depth exploration of key technologies shaping the future. Students will dive into the fundamentals of robotics, artificial intelligence, networking, engineering, 3D printing, and drones gaining a foundation in each area. Students will discover the world of unmanned aerial vehicles, from their design and operation to practical applications in industries such as surveying, delivery, and agriculture. Students will program and troubleshoot simple drones while grasping the fundamentals of electrical, mechanical, and systems engineering as they apply to building technological devices. By the end of the course students will have developed a comprehensive understanding of these interconnected fields and be prepared for further study in technology or engineering.



TRAINED 2: APPLIED SYSTEM AND DESIGN (WHS only)

Grades 10,11,12

.50 credit

Prerequisite: Trained for the Future

This advanced, project-based course moves beyond exploration and into application and integration. Students will function as a high-tech design team, applying the foundational knowledge gained in "**TRAINED for the Future**" to solve complex, real-world challenges. Instead of studying each topic in isolation, students will synthesize robotics, artificial intelligence, networking, and engineering principles in long-term projects.

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

1.0 credit

Prerequisite: Teacher and Administrator Recommendation

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

1.0 credit

Prerequisite: Teacher and Administrator Recommendation

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

1.0 credit

Prerequisite: Teacher and Administrator Recommendation

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)



Grade 9, 10, 11, 12

1.0 credit

Prerequisite: Teacher, guidance and/or administrative recommendation for 9th 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 GOVERNMENT AND POLITICS (NCAA)



Grade 10, 11, 12

1.0 credit

Prerequisite: Teacher, guidance and/or administrative recommendation for 10th 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. This course can be taken in addition to or in place of Civics.

Following the College Board's suggested curriculum designed to parallel college-level US Government courses, AP United States Government and Politics introduces students to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that make up the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions.

AP UNITED STATES HISTORY (NCAA)



Grade 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)



Grade 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)



Grade 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 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)



Grade 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.

AP AFRICAN AMERICAN STUDIES



Grade 11, 12

1.0 credit

Prerequisite: grade of 80% or higher in ELA 10 and at least one completed prior AP course.

Following the College Board's suggested curriculum, AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with rich and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment.

ACADEMIC PROGRAM

CIVICS (NCAA)



Grade 10

1.0 credit

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

1.0 credit

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.

WORLD HISTORY (NCAA)



Grade 12

1.0 credit

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.

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	No Prerequisite
AP Human Geography	9, 10, 11, 12	See course description
AP United States Government and Politics	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	See course description
AP Psychology	10, 11, 12	See course description
AP African American Studies	11, 12	See course description
History Through Sporting and Cultural Events	9, 10, 11, 12	No prerequisite
Civil Rights	9, 10, 11, 12	No prerequisite
Military History	9, 10, 11, 12	No prerequisite

LEGAL EDUCATION (NCAA)



Grade 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)



Grade 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



Grade 9, 10, 11, 12

.50 credit

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)



Grade 10, 11, 12

1.0 credit

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



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.

HISTORY THROUGH SPORTING AND CULTURAL EVENTS



Grade 9, 10, 11, 12

.50 credit

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 the controversies surrounding the Paris Olympics (2024) and countries that have been affected by the performances of their chosen athletes.

CIVIL RIGHTS



Grade 9, 10, 11, 12

.50 credit

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



Grade 9, 10, 11, 12

.50 credit

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.

WORLD LANGUAGES

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)



Grade 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)



Grade 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)



Grade 10, 11, 12

1.0 credit

Prerequisites: French II, Spanish II, German II and Teacher and Administrator recommendation

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 III ~ HONORS SPANISH III ~ HONORS GERMAN III (NCAA)



Grade 9

1.0 credit

Prerequisites: French II, Spanish II, German II and Teacher and Administrator recommendation

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)



Grade 10, 11, 12

1.0 credit

Prerequisites: French III, Spanish III, German III, and Teacher and Administrator 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.

AP FRENCH ~ AP SPANISH ~ AP GERMAN (NCAA)



Grade 11, 12

1.0 credit

Prerequisites: French IV, Spanish IV, German IV

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



Grade 9, 10, 11, 12

.50 credit

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.

FRENCH CULTURE



Grade 9, 10, 11, 12

.50 credit

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.

GERMAN CULTURE



Grade 9, 10, 11, 12

.50 credit

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.



Program Guide

2026-2027

MCTI is an extension of the four school districts of Monroe County and provides tuition-free career and technical education for high school students. Students in grades 10 – 12 attend a half-day at MCTI and a half-day at their sending high school. MCTI also offers a full-day program for 9th grade students.

An MCTI education provides students with more opportunities to learn practical skills using state-of-the-art equipment, develop leadership skills, obtain industry credentials, and earn college credits all while gaining real-world experiences.

SENDING SCHOOL DISTRICTS



**East Stroudsburg Area
School District**



**Pleasant Valley
School District**

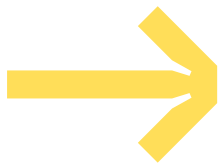


**Pocono Mountain
School District**



**Stroudsburg Area
School District**





PROGRAMS

MCTI offers students 25 Pennsylvania Department of Education (PDE) approved programs that articulate a secondary career and technical education to a postsecondary degree, diploma, or certificate programs. These programs align the secondary courses to a postsecondary program to complete a degree or certificate. Our programs are divided into the following five Career Clusters:

TRANSPORTATION



Automotive Collision Repair.....	1
Automotive Technology.....	2
Diesel Technology.....	3
Outdoor Power Equipment Technology.....	4

CONSTRUCTION



Carpentry.....	5
Electrical Technology.....	6
HVAC Technology.....	7
Masonry.....	8
Plumbing.....	9

ENGINEERING TECHNOLOGY



Drafting & Design Technology.....	10
Electronics Technology.....	11
Precision Machining.....	12
Welding Technology.....	13

COMMUNICATIONS



Computer Information Science.....	14
Computer Networking & Security.....	15
Graphic Communications.....	16

SERVICE



Business and Hospitality Management.....	17
Cosmetology.....	18
Criminal Justice.....	19
Culinary Arts.....	20
Health Professions.....	21
Horticulture.....	22
Therapeutic Science/Sports Medicine.....	23
First Responder.....	24
Diversified Occupations.....	25



AUTOMOTIVE COLLISION REPAIR

47.0603 AUTOBODY/COLLISION AND REPAIR TECHNOLOGY/TECHNICIAN
(PDE APPROVED PROGRAM OF STUDY)



The Auto Collision Repair Program prepares students to apply technical knowledge and skills to repair damaged vehicles, such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate repair costs; repair and replace upholstery, accessories, electrical and hydraulic windows and seat operating equipment. They are instructed on how to remove 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.

CAREER PATHS

- Automobile Body and Related Repairers
- Helpers-Installation, Maintenance and Repair Workers
- Automotive Specialty Technicians
- Painters, Transportation Equipment



According to I-CAR, nearly half of entry-level technicians hired are selected from career or technical school programs.

INDUSTRY CREDENTIALS

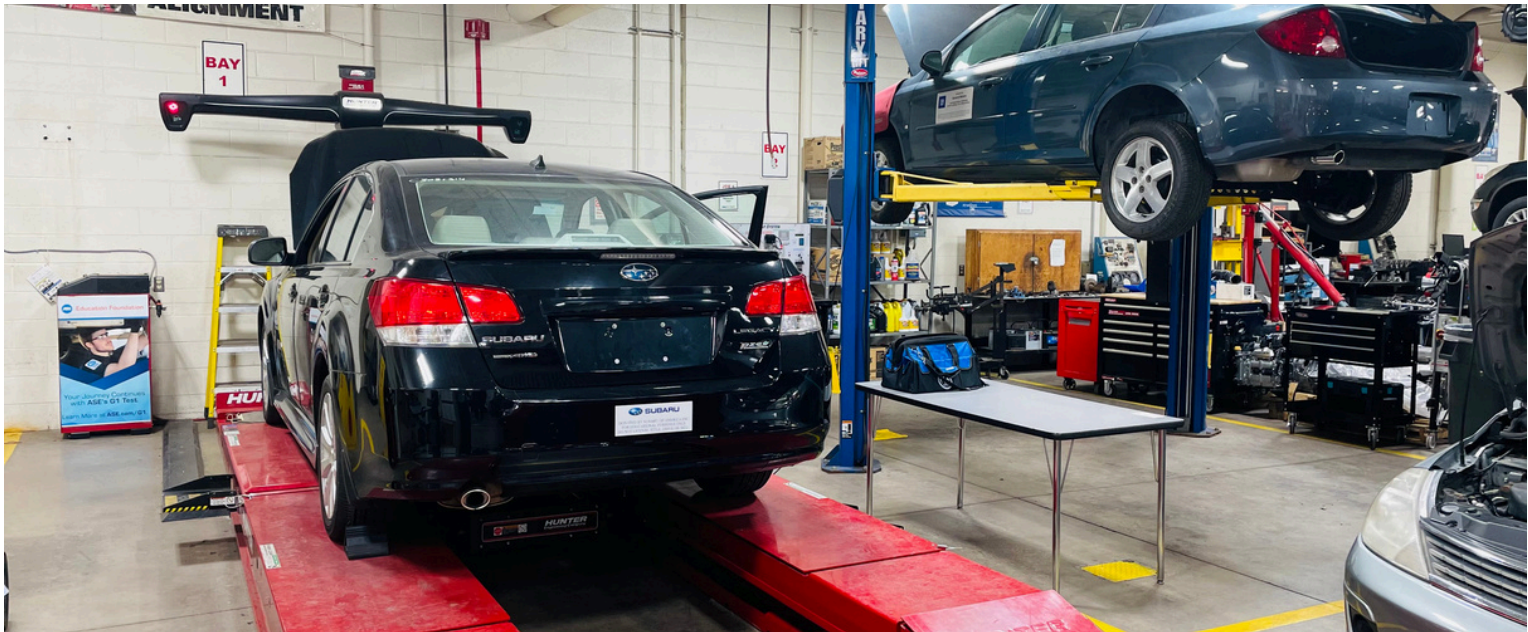
Students can earn the following industry-recognized credentials:

- S/P2 Automotive Certification via S/P2
- OSHA via Careersafe



AUTOMOTIVE TECHNOLOGY

47.0604 AUTOMOBILE/AUTOMOTIVE MECHANICS TECHNOLOGY/TECHNICIAN
(PDE APPROVED PROGRAM OF STUDY)



The Automotive Technology Program prepares students to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. Students will learn to diagnosis malfunctions in engines, fuel, electrical, brake systems, as well as drive trains and suspension systems. Testing to repair these malfunctions may include computer analysis. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, fuel system components and air conditioning using technical repair information, and state inspection procedures.

This program is certified by the National Automotive Technicians Education Foundation (NATEF). 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.

Alternate fuels and hybrid vehicles mass production will create 150,000 new jobs. For the next few years, production of hybrid cars will grow to about 5.4 million units.

CAREER PATHS

- Automotive Service Technician and Mechanic
- Automotive Specialty Technician
- Administrative Service Manager

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- S/P2 Automotive Certification via S/P2
- Certified Safety Inspector, Cat I via PA Dept. of Transportation
- Section 609 Certification for Refrigerant, Recycling and Recovery via Mobile Air Conditioning Society Worldwide
- ASE via Automotive Service Excellence
- Battery Starting and Charging System via AC Delco
- Electrical State 1 & 2 via AC Delco
- AYES Certificate via Automotive Youth Educational System
- Motor Oil Certification via Valvoline



DIESEL TECHNOLOGY

47.0613 MEDIUM/HEAVY VEHICLE AND TRUCK TECHNOLOGY/TECHNICIAN
(PDE APPROVED PROGRAM OF STUDY)



The Diesel Technology Program is designed to prepare students 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).



On average, approximately 28,000 openings for diesel service technicians and mechanics have been projected each year over this decade.

CAREER PATHS

- Bus and Truck Mechanic
- Diesel Engine Specialist
- Industrial Machinery Mechanic
- Automotive Master Mechanic
- Helpers-Installation
- Farm Equipment Mechanic

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- S/P2 Automotive Certification via S/P2
- Certified Safety Inspector, Cat I via Pennsylvania Department of Transportation
- Section 609 Certification for Refrigerant Recycling and Recovery via National Institute for Automobile Service Excellence



OUTDOOR POWER EQUIPMENT TECHNOLOGY

47.0699 VEHICLE MAINTENANCE AND REPAIR TECHNOLOGIES, OTHER
(PDE APPROVED CAREER TECH PROGRAM)



The Power Equipment Technologies Program prepares students 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. Students are instructed 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.

According to the U.S. Bureau of Labor Statistics, overall employment of small engine mechanics is projected to grow 9 percent or approximately 8300 jobs each year. The global powersports market is projected to grow from \$8.76 billion to \$12.75 billion over the next five years.

CAREER PATHS

- Engine Repair Technician
- Gas-Engine Technician
- Power-Saw Mechanic
- Small-Engine Mechanic
- Motorboat Mechanics and Service Technician
- Motorcycle Mechanic

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- S/P2 Automotive Certification via S/P2
- S/P2 Safety and Pollution Prevention via S/P2
- OSHA Certification via CareerSafe
- Outdoor Power Equipment Technician Certification via Equipment & Engine Training Council
- Master Service Technician via Briggs and Stratton Corporation
- STIHL MasterWrench Service Technician-Bronze via STIHL



CARPENTRY

46.0201 CARPENTRY/CARPENTER
(PDE APPROVED PROGRAM OF STUDY)



The Carpentry Program prepares students 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. Students are taught with a combination of classroom theory and hands-on building experience in residential, commercial, and industrial construction trades.



Employment of carpenters is projected to grow 8% over the next five years, being one of the fastest growing occupations. Population growth may result in more new-home construction—one of the largest segment employing carpenters—which will require many new workers.

CAREER PATHS

- Rough Carpenter
- Carpenter Helper
- Roofer
- Drywall

INDUSTRY CREDENTIALS

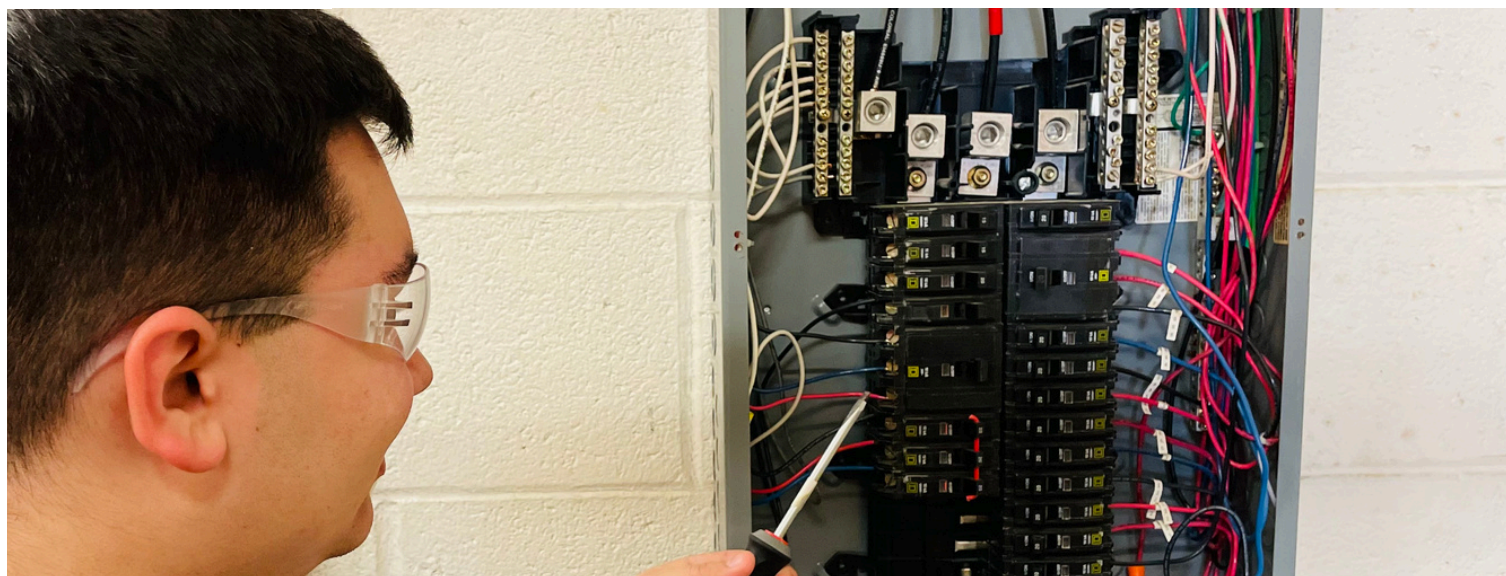
Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Pennsylvania Builders Association Skills Certificate via Pennsylvania Builders Association
- Articulated Ladder via American Ladder Institute
- Mobile Ladder via American Ladder Institute
- Single and Extension Ladder via American Ladder Institute
- Step Ladder via American Ladder Institute
- SP/2 Construction via SP/2



ELECTRICAL TECHNOLOGY

**46.0399 ELECTRICAL AND POWER TRANSMISSION INSTALLERS, OTHER
(PDE APPROVED PROGRAM OF STUDY)**



The Electrical Technology Program prepares students 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.

Students are 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 and receive practical experience by completing many projects.



America will face a shortage of electricians in the near future, according to the U.S. Bureau of Labor Statistics (BLS) and the National Electrical Contractors Association (NECA). The trade group says that 7,000 electricians join the field each year, but 10,000 retire. The BLS reports that employment of electricians is projected to grow 10% over the next five to seven years— making it one of the fastest growing occupations.

CAREER PATHS

- Electrician Helper
- Electrician, Apprentice
- First Line Supervisor and Manager
- Electric Motor and Switch Assembler and Repairer

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Pennsylvania Builders Association Skills Certificate
- Articulated Ladder via American Ladder Institute
- Mobile Ladder via American Ladder Institute
- Single and Extension Ladder via American Ladder Institute
- Step Ladder via American Ladder Institute
- SP/2 Construction via SP/2



HVAC TECHNOLOGY

**47.0201 HEATING, AIR CONDITIONING, VENTILATION
AND REFRIGERATION MAINTENANCE TECHNOLOGY/TECHNICIAN
(PDE APPROVED PROGRAM OF STUDY)**



The Heating, Ventilation & Air Conditioning (HVAC) Program combines classroom and practical learning experiences. This program prepares students 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.



HVAC's massive compound annual growth rate of about 4% will reach an estimated market size of \$370 billion by 2030.

CAREER PATHS

- Helpers- Installation, Maintenance, and Repair Workers
- Refrigeration Mechanic
- Air Conditioning and Heating Mechanics
- First Line Supervisors of Production and Operating Workers
- Stationary Engineer

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- PBA Skills Certificate via Pennsylvania Builders
- EPA 608 Certification via Air Conditioning, Heating & Refrigeration Institute
- Articulated Ladder via American Ladder Institute
- Mobile Ladder via American Ladder Institute
- Single and Extension Ladder via American Ladder Institute
- Step Ladder via American Ladder Institute
- SP/2 Construction via SP/2



MASONRY

46.0101 MASON/MASONRY
(PDE APPROVED PROGRAM OF STUDY)



The Masonry Program prepares students 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. There are several essential qualities to succeed at becoming a mason. Masons must regularly lift very heavy equipment and materials, such as blocks that weigh more than 40 pounds. Manual dexterity is also essential to applying smooth, even layers of mortar and quickly set bricks. Masons must have creativity to cut and shape masonry units into attractive and functional structures. They must also have the ability to read and comprehend blueprints, plans and instructions including safety policies and procedure manuals.



Masonry is one of the oldest of the skilled trades. It dates back to the use of sunbaked clay brick more than 6,000 years ago; stone masonry dates back even further.

CAREER PATHS

- Brickmasons and Blockmasons
- Stonemasons
- Tile and Marble Setters
- Segmental Pavers
- Cement Mason and Concrete Finishers
- First-line Supervisors and Managers/Supervisors- Construction Trade Workers

INDUSTRY CREDENTIALS

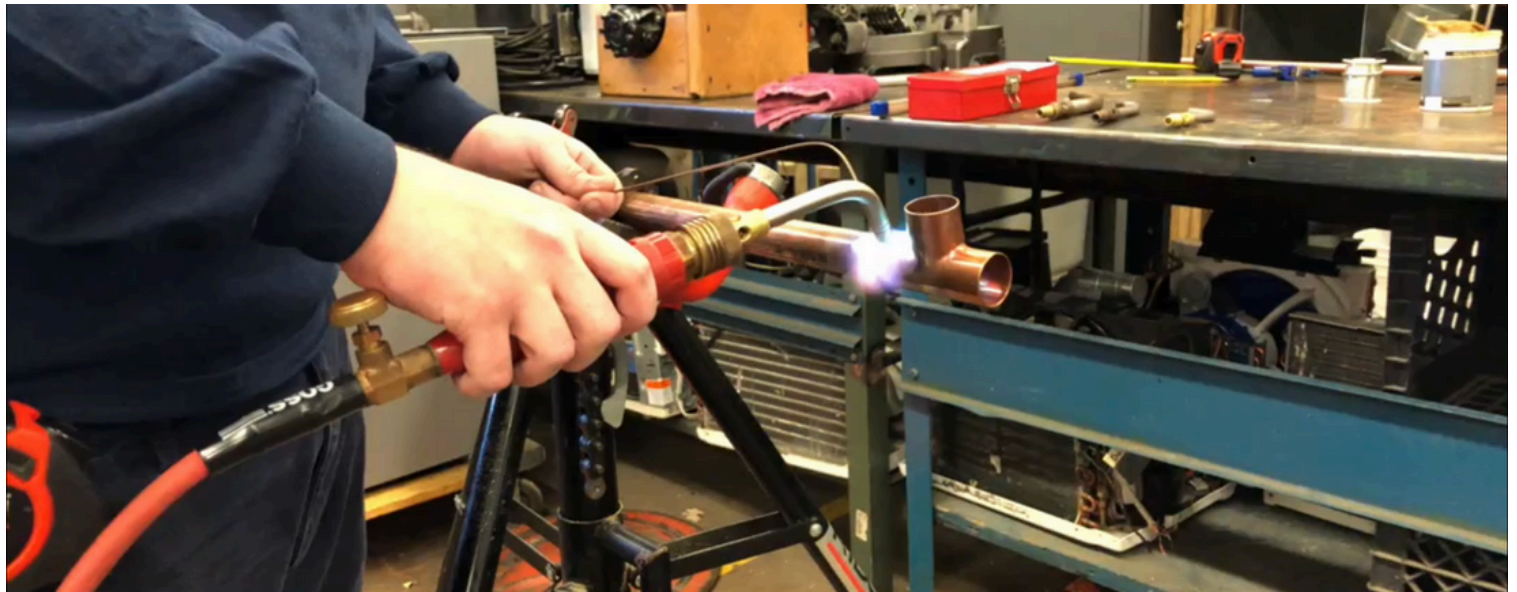
Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Pennsylvania Builders Association Skills Certificate
- Articulated Ladder via American Ladder Institute
- Mobile Ladder via American Ladder Institute
- Single and Extension Ladder via American Ladder Institute
- Step Ladder via American Ladder Institute
- SP/2 Construction via SP/2



PLUMBING

**46.0503 PLUMBING TECHNOLOGY/PLUMBER
(PDE APPROVED PROGRAM OF STUDY)**



Plumbing Technology prepares students 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.

INDUSTRY CREDENTIALS

Over the next 10 years, it is expected that 81,900 plumbers will be needed; this includes 75,200 additional plumbers, and the retirement of 6,700 existing plumbers. According to the Bureau of Labor Statistics, plumbing related jobs are projected to grow by 16% in the coming years, much faster than average.



CAREER PATHS

Students can earn the following industry-recognized credentials:

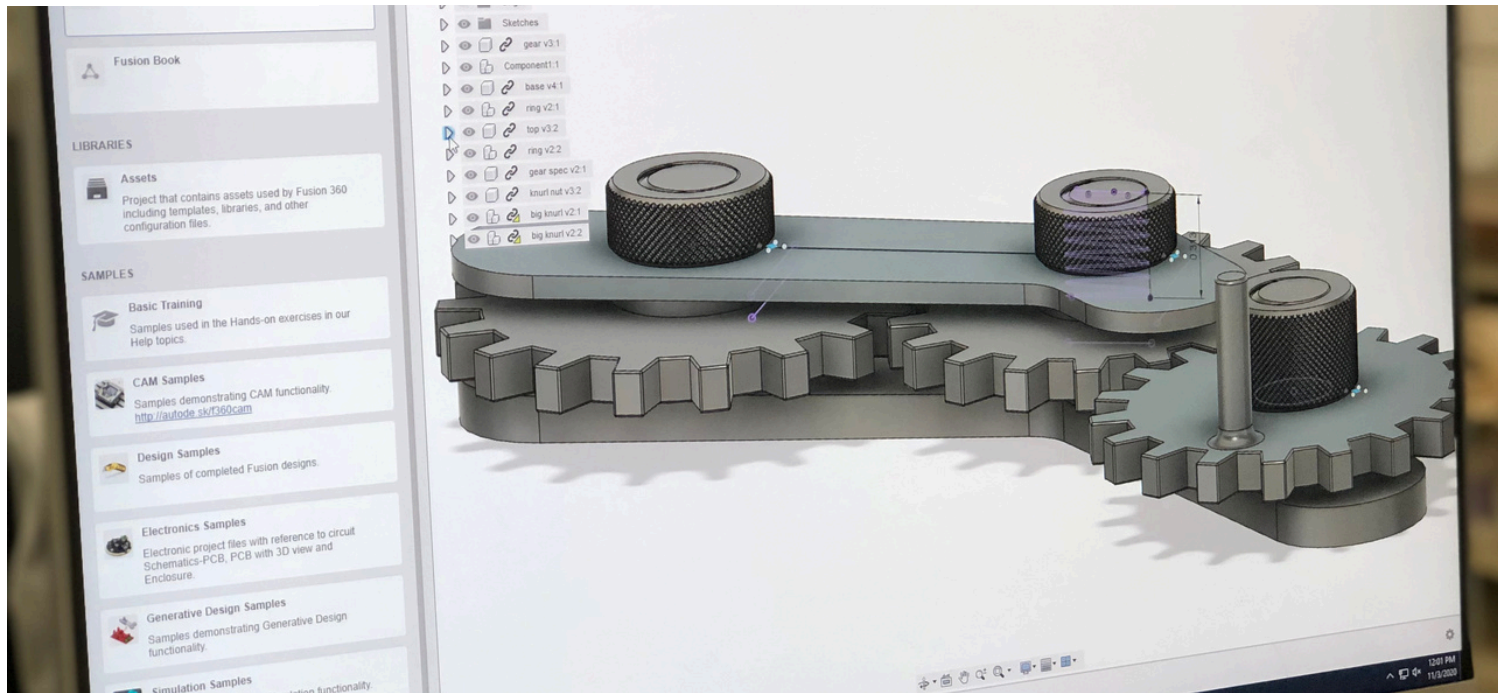
- OSHA Certification via CareerSafe
- PBA Skills Certificate via Pennsylvania Builders Association
- EPA 608 Certification via Air Conditioning, Heating & Refrigeration Institute
- Articulated Ladder via American Ladder Institute
- Mobile Ladder via American Ladder Institute
- Single and Extension Ladder via American Ladder Institute
- Step Ladder via American Ladder Institute
- SP/2 Construction via SP/2

- Pipefitter and Steamfitter Plumbers
- Plumber
- Heating and Air Conditioning Mechanics
- First Line Supervisor Managers and Mechanics, Installers and Repairers



DRAFTING & DESIGN TECHNOLOGY

15.1301 DRAFTING AND DESIGN TECHNOLOGY/TECHNICIAN, GENERAL
(PDE APPROVED PROGRAM OF STUDY)



Drafting & Design Technology prepares students 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 Computer Aided Design (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.

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



Many MCTI Drafting & Design alumni are enrolled in higher education programs such as design, architecture, teaching and mechanical engineering.

CAREER PATHS

- Mechanical Drafter
- Architectural Drafter
- Civil Drafter
- Interior Designer
- Engineering

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Autodesk Certified User via Autodesk



ELECTRONICS TECHNOLOGY

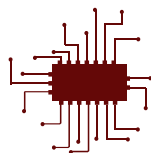
15.0303 ELECTRICAL, ELECTRONIC AND COMMUNICATIONS,
ENGINEERING TECHNOLOGY/TECHNICIAN
(PDE APPROVED PROGRAM OF STUDY)



Electronics Technology prepares students 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.

CAREER PATHS

- Production Repairer
- Electronic Assembler
- Electrical & Electronic Technicians
- Communication Technician
- Electronic Engineer
- Electrical & Electronic Drafters
- Electro-Mechanical Technicians



Electrical and electronics engineers are among the best paid in the field, earning between \$94,210 and \$99,210. The projected growth rate for both occupations is about 7% each year.

INDUSTRY CREDENTIALS

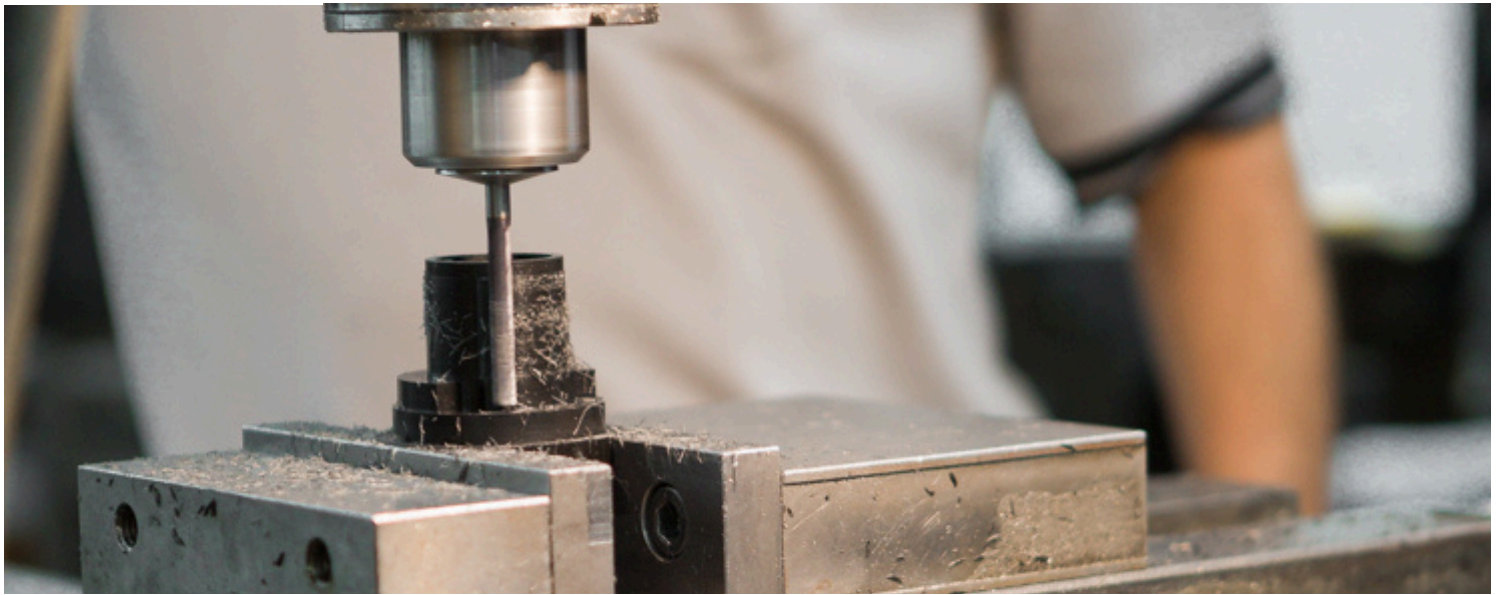
Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Ladder Certifications via American Ladder Institute



PRECISION MACHINING

48.0501 MACHINE TOOL TECHNOLOGY/MACHINIST
(PDE APPROVED PROGRAM OF STUDY)



Precision Machining is designed to provide students instruction, knowledge and skills in all aspects of shaping parts for industrial applications. 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, computer-aided design (CAD) along with the technical mathematics, science, and communication skills essential to a career in manufacturing. The program is certified by the National Institute of Metalworking Skills Inc. (NIMS).

Individuals trained in the area of precision machining rank among the top five most needed employees in the United States.



CAREER PATHS

- Machine Tool Setter
- Machinist
- Machine Tool Operator
- Tool and Die Maker
- Mechanical Engineer
- Mechanical Inspector
- CNC Programmer

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials via National Institute for Metalworking Skills, Inc.:

- NIMS Machining Level I
- NIMS Machining Level I CNC milling
- NIMS Machining Level I CNC turning
- NIMS Machining Level I Manual Milling
- NIMS Machining Level I Manual turning between centers
- NIMS Machining Level I Manual turning with chucking
- NIMS Machining Level I Manual Drill Press Operations
- NIMS Machining Level I Measurement, Materials and Safety
- NIMS Machining Level I Planning, Benchwork, Layout



WELDING TECHNOLOGY

48.0508 WELDING TECHNOLOGY/WELDER
(PDE APPROVED PROGRAM OF STUDY)



The Welding Technology Program prepares students 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. Welding standards are 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.

CAREER PATHS

- Combination Welders, Cutters, Solderers, & Brazers
- Skilled production Welders and Laborers
- Engineering Technician



Did you know that you can literally work on the bottom of the ocean? Underwater welders are a specialized occupation and can afford opportunities to travel to places that many people would normally not have the opportunity to visit.

INDUSTRY CREDENTIALS

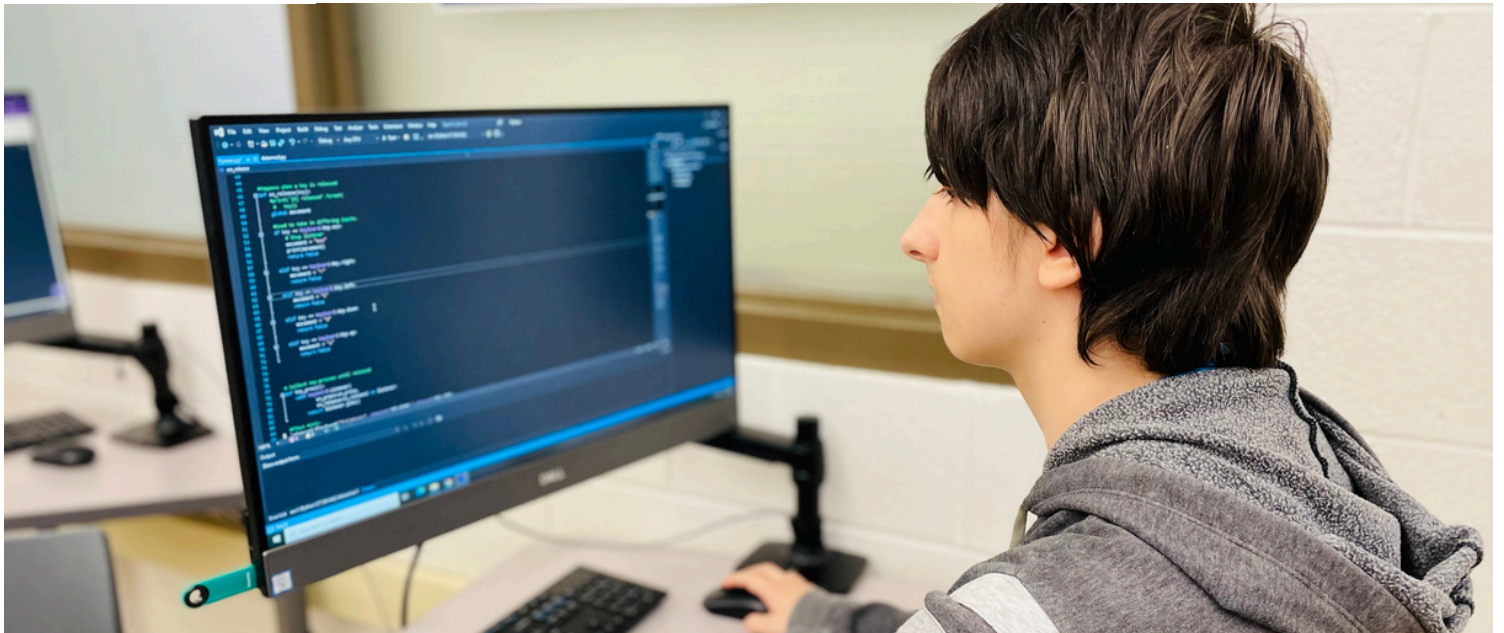
Students can earn the following industry-recognized credentials:

- American Welding Society Welding Certification via American Welding Society
- Ladder Certifications via American Ladder Institute
- OSHA Certification via CareerSafe



COMPUTER INFORMATION SCIENCE

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



The Computer Information Science Program prepares students 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, and will learn office safety, computer fundamentals, database administration and computer maintenance/troubleshooting.

CAREER PATHS

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



Employment in computer and information technology occupations is projected to grow 13 percent over the next ten years, making this one of the fastest growing occupations.

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- IT Fundamentals via CompTIA
- OSHA Certification via CareerSafe
- Cybersecurity Essentials For Work via CareerSafe
- Oracle Certification (path based on product) via Oracle



COMPUTER NETWORKING & SECURITY

11.0901 COMPUTER SYSTEMS NETWORKING AND TELECOMMUNICATIONS
(PDE APPROVED PROGRAM OF STUDY)



The Computer Networking and Security Program 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 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.



Computer and information technology (IT) professionals made a median salary of \$91,250 in May 2020, according to the US Bureau of Labor Statistics (BLS). That's significantly more than the median salary for all other occupations, which was \$41,950.

CAREER PATHS

- Network Systems and Data Communications Analyst
- Information Security Analysts
- Web Developers
- Network and Computer Systems Administrators
- Computer User Support Specialists
- Computer Network Support Specialists

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- A+ via Computing Technology Industry Association (Comp TIA)
- Network+ via Comp TIA
- Security+ via Comp TIA
- Cisco Certified Network Associate (CCNA) via CISCO
- PC Pro via Test Out
- Network Pro via Test Out
- Security Pro via Test Out



GRAPHIC COMMUNICATIONS

10.0399 GRAPHIC COMMUNICATIONS, OTHER
(PDE APPROVED PROGRAM OF STUDY)



Graphic Communications prepares students 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.

CAREER PATHS

- Commercial & Industrial Designers
- Graphic Designers
- Desktop Publishers
- Screen Printing / Embroidery
- Prepress / Finishing and Binding
- Printing Press Operators
- Etchers and Engravers



Graphic design allows you to make your own mark while working to meet your clients' needs. With freedom and creativity comes variety, and this makes things fun and sharpens your skills in a variety of visual styles.

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe



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 (including social media), product/service management, distribution, financing, guest services, front office operations, facilities management, resort management and marketing information management. In addition, this 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.

CAREER PATHS

- 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 Representatives
- Guest Relations
- Event Planning
- Entertainment and Leisure Services
- Food and Beverage Operations



According to Mediakix, there is a \$1 billion influencer marketing industry on Instagram, which continues to grow.

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Guest Service Gold via American Hotel & Lodging Educational Institute
- Certified Hospitality & Tourism Management Professional via American Hotel & Lodging Educational Institute



COSMETOLOGY

12.0401 COSMETOLOGY /COSMETOLOGIST, GENERAL
(PDE APPROVED CAREER TECH PROGRAM)



The Cosmetology Program 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.



According to US Bureau of Labor Statistics, more than 30% of all salon industry professionals are self-employed.

CAREER PATHS

- Manicurist
- Hairdresser
- Hairstylist
- Cosmetologist
- Manager
- Skin Care Specialist

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- Cosmetologist via Pennsylvania Department of State, State Board of Cosmetology
- OSHA Certification via CareerSafe



CRIMINAL JUSTICE

**43.0107 CRIMINAL JUSTICE/POLICE SCIENCE
(PDE APPROVED PROGRAM OF STUDY)**



The Criminal Justice Program prepares students 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.



Criminal Justice careers are honorable and provide the opportunity for service and a commitment to duty. There are many different aspects associated with careers in the Criminal Justice field, providing a wide range of opportunities.

CAREER PATHS

- Police and Sheriff's Patrol Officer
- Security Officer
- Correctional Officer
- Police, Fire and Ambulance Dispatchers
- Forensic Evidence Technician
- Police and Private Detectives and Investigators
- Bailiffs

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- NIMS IS 100, 200, 700, 800 via Emergency Management Institute
- First Aid via American Heart Association
- Adult CPR via American Heart Association
- AED Essentials via American Heart Association
- Certified Protection Officer, CPO via International Foundation for Protection Officers



CULINARY ARTS

12.0508 INSTITUTIONAL FOOD WORKERS
(PDE APPROVED PROGRAM OF STUDY)



The Culinary Arts Program prepares students for employment related to institutional, commercial 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. The MCTI Culinary Arts program is certified by the American Culinary Federation.



MCTI Culinary Arts students run the Laurel Lake Cafe. The cafe is a full service restaurant that is open to the public Tuesday through Friday.

CAREER PATHS

- Chefs and Head Cooks
- First Line Supervisors of Food Preparation and Serving Workers
- Baker
- Cooks, Restaurant
- Cooks, Short Order
- Food Preparation Workers
- Waiter/Waitress

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Certified Fundamental Cook (CFC) via American Culinary Federation
- ServSafe/Manager Food Safety Certification via National Restaurant Association
- ServSafe Food Handler Certification via National Restaurant Association
- ProStart National Certificate of Achievement via Pennsylvania Restaurant & Lodging Association (PRLA)
- ServSafe Allergen Certification via ServSafe
- SP2 Workplace Safety Certification via SP2
- SP2 Food Safety Certification via SP2



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 this program will find themselves well prepared to enter the workforce as a PCA (Patient Care Attendant) or Homecare Provider. Upon successful completions, students will have obtained First Aid, CPR, AED and Stop The Bleed certifications. The program includes an extensive eight-week shadowing experience for juniors and 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 Adult Continuing Education evening program and/or participate in an articulation agreement with Northampton Community College.

CAREER PATHS

- Health Technologists and Technicians, All Other
- Healthcare Practitioners and Technical Workers, All Other
- Healthcare Support Workers, Other
- Patient Care Attendant (PCA)
- Homecare Provider



Healthcare is one of the fastest growing sectors of the economy and is estimated to increase 19% between now and 2024, creating over 2 million new job openings.

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- BLS Healthcare Provider via American Heart Association
- Stop The Bleed Certification
- Personal Care Assistant



HORTICULTURE

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



The Horticulture program has a combination of organized subject matter and practical experiences that 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.



Pennsylvania leads the country in mushroom growing. The 68 mushroom farms in the state produced 63 percent of all those in the United States.

CAREER PATHS

- Landscape Architect
- Landscaping and Groundskeeping
- Agricultural Worker
- Nursery and Greenhouse Workers
- Farmers, Ranchers, and Other Agricultural Managers

INDUSTRY CREDENTIALS

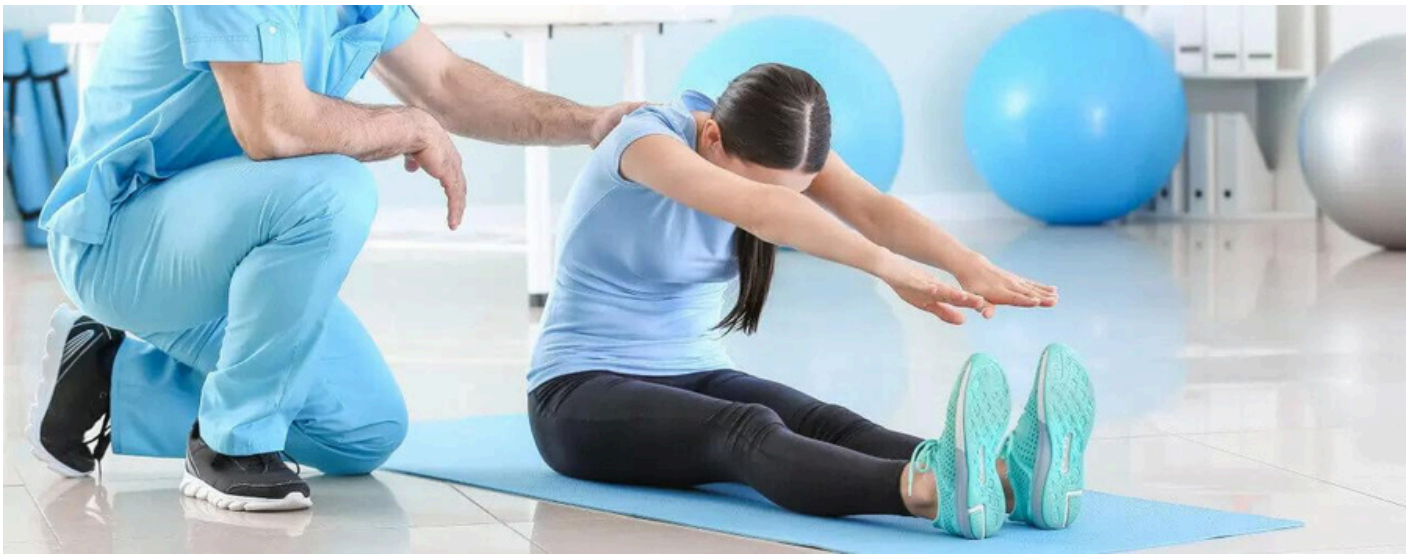
Students can earn the following industry-recognized credentials:

- OSHA Certification- Agriculture via CareerSafe
- National Safe Tractor and Machinery Operator via Hazardous Occupations and Safety Training in Agriculture (HOSTA)
- Certified Landscape Technician (CLT) via Pennsylvania Landscape & Nursery Association
- Pennsylvania Certified Horticulturist (PCH) via Pennsylvania Landscape & Nursery Association
- Worker Protection Standard Training via US Environmental Protection Agency Region III
- Landscape Safety via Greenius



THERAPEUTIC SCIENCE/SPORTS MEDICINE

**51.2604 Rehabilitation Aide
(PDE APPROVED CAREER TECH PROGRAM)**



Therapeutic Science and Sports Medicine is a program designed to educate students on the theories of injury prevention, recognition, and emergency care as well as health and wellness. This technical program will include theory and hands on application related to anatomy, physiology, therapeutic exercise, restorative care, strength and conditioning, injury recognition, injury management, weight management and nutrition. Students will learn to design exercise programs, nutrition plans, injury preventative plans, and injury recovery plans that promote overall mental and physical health and wellness. Students will leave the program prepared for employment in settings that include fitness clubs, assisted care facilities, and wellness programs. Students who wish to pursue an advanced degree will have a strong foundation to enter post-secondary programs in the fields of exercise science, physical therapy, occupational therapy, and athletic training.

CAREER PATHS

- Personal Trainer
- Strength & Conditioning Coach
- Sports Performance Coach
- Physical Therapist Assistant
- Massage Therapist
- Rehabilitation Aide
- Sports Medicine
- Athletic Trainer
- Occupational Therapist
- Physical Therapist



Employment in the field has a bright outlook and is predicted to grow 14 percent between 2022-2032 which is faster than average.

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification- Healthcare via CareerSafe
- First Aid CPR AED via American Heart Association
- Physical Therapy Technician/Aide Certification - AMCA
- Certified Personal Trainer - NASM



FIRST RESPONDER

**51.0904 Public Safety and Emergency Medicinee
(PDE APPROVED CAREER TECH PROGRAM)**



This program introduces students to careers across the emergency response field, including firefighter, police officer, 911 dispatcher, emergency medical responder, and emergency medical technician. Professionals in these roles are often the first on the scene during crises, providing critical assistance in situations such as fires, motor vehicle accidents, crime scenes, and medical emergencies. The First Responder program emphasizes the knowledge and skills required for effective emergency medical care. Throughout the program, students develop the ability to assess emergencies, deliver patient care, and work collaboratively with other public safety personnel. In the final year, students will have the opportunity to earn Emergency Medical Technician (EMT) certification, preparing them for entry-level employment or further specialized training in emergency services.



Employment in the field has a bright outlook and is predicted to grow 14 percent between 2022-2032 which is faster than average.

CAREER PATHS

- Fire Fighter
- Police Officer
- 911 Dispatch
- EMT
- Paramedic
- Emergency Management

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification- Healthcare via CareerSafe
- First Aid CPR AED via American Heart Association
- NIMS IS 100, 200, 700, 800
- Emergency Medical Technician



DIVERSIFIED OCCUPATIONS

32.0105 JOB-SEEKING/CHANGING SKILLS
(PDE APPROVED TECH PREP PROGRAM)



The Diversified Occupations Program (D.O.) 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-the-job 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 D.O. Program is a partnership between MCTI, the sending district, the student and the student's parents/guardians, 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.

CAREER PATHS

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

INDUSTRY CREDENTIALS

Students can earn the following industry-recognized credentials:

- OSHA Certification via CareerSafe
- Employability Skills via Careersafe

Get Involved!



CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSO)

Every program provides opportunities for participation in a CTSO. CTSOs are vocational student organizations primarily based in high schools, colleges and career technology centers, similar to school clubs and extracurricular activities. More information about specific organizations is available through the program instructor.



National Technical
Honor Society





**MCTI STUDENTS CAN
EARN COLLEGE
CREDITS THROUGH
ARTICULATION
AGREEMENTS!**

SOAR- Statewide Articulation Agreements

<https://www.collegetransfer.net/Search/PA-Bureau-of-CTE-SOAR-Programs>

The mission of SOAR (Students Occupationally and Academically Ready) is to prepare students for college and careers in a diverse, high-performing workforce by allowing students to transfer credits to the post-secondary level. To be eligible for articulated credits under the SOAR program students must complete their POS task list at the proficient level, score competent or advanced on their NOCTI, and earn a 2.75 program GPA.

Local Articulation Agreements

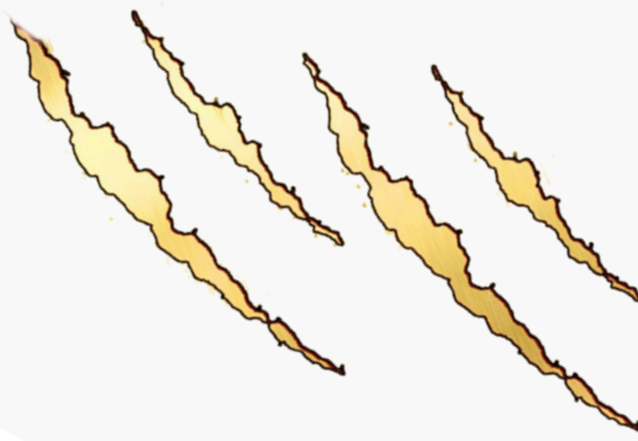
https://docs.google.com/spreadsheets/d/1eov4nStARjOKbQQ_HBo2BSUfgePKV-IA-dCERV9X2YE/edit?gid=0#gid=0

Articulation agreements are formal partnerships between educational institutions that outline the terms and conditions for the transfer of credits. These agreements specify which courses taken at one institution will be recognized and accepted for credit by another institution. They are designed to provide a clear pathway for students to transfer from one educational program to another while ensuring the continuity of their academic progress.

For more information please contact Abigail Tomsho.

atomsho@monroecti.org

570-629-2001 ext 1117



HOW DO I APPLY?

-Contact-

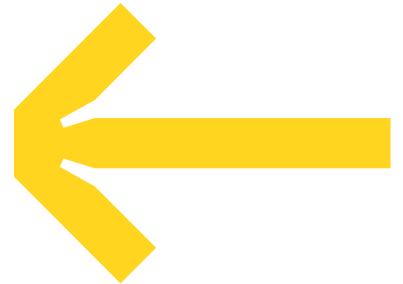
Contact MCTI or your School Counselor. More information can be found at www.monroecti.org.

-Apply-

Complete an online application on our website.

Apply Now!

*Your Future
Starts Here!*



FOLLOW US!
 & 
Facebook Instagram



MONROE CAREER & TECHNICAL INSTITUTE

194 LAUREL LAKE RD, BARTONSVILLE, PA 18321

WWW.MONROECTI.ORG

(570) 629-2001

The Monroe Career & Technical Institute is an equal education institution and will not discriminate on the basis of age, race, color, national origin, gender or handicap in its activities, programs or employment practices as required by Title VI, Title IX, Section 504 and the Americans with Disabilities Act. For information regarding civil rights or grievance procedures, and information regarding services, activities and facilities that are accessible to and usable by handicapped persons, contact Abigail Tomsho, Supervisor of Curriculum & Instruction, at 194 Laurel Lake Rd, Bartonsville, PA 18321 (570) 629-2001.