Pocono Mountain School District

CYBER

Always Open for Learning

Program of Studies

Grades Kdg-12

Graduation Requirements

2021-2022

The Mission of The Pocono Mountain School District is To Prepare All Students for Tomorrow's Challenges and Opportunities.

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THE POCONO MOUNTAIN SCHOOL DISTRICT MISSION

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

THE POCONO MOUNTAIN SCHOOL DISTRICT MISSION AND PRACTICE

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

The 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 2022 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 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 and 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 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.

Established cut scores for alternate assessments and guidelines to define pathway evidence will be released in the 2021-2022 school year.

CAREER READINESS INDICATOR FOR FUTURE READY PA INDEX

Background

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

- A more holistic tool for communities to measure school success.
- Less reliant on point-in-time standardized test scores.
- Comprehensive measures that value a school's efforts to help all students learn, grow, and succeed in the classroom and beyond.

As part of the Every Student Succeeds Act (ESSA), there are six (6) Federal Accountability Indicators:

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

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

Career Readiness Indicator

- Ensures that all students have access to career exploration and preparation activities that are standards-aligned and evidence-based.
- Percent of students who demonstrate meaningful engagement in career exploration and preparation and implementation of individualized career plans through separate, specific measures based on 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
• **6 pieces of evidence** • **2 per year, per grade level** • **At least 1 piece of evidence per CEW Strand**	• **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**	• **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 in the class of 2022 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.

2021-2022 COURSE SEQUENCING GUIDE

CORE COURSE SEQUENCES

HONORS

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

Grade	English Language Arts (ELA)	Mathematics	Science	Social Studies	World Language (not a core course)
9	Honors	Honors Geometry	Honors Biology	Elective *AP Human Geography	
10	Honors	Honors Algebra II	Honors Chemistry *AP Biology	Honors Civics *AP US History *AP European History *AP Psychology *AP Human Geography *AP World History	Honors *Spanish IV *French IV *German IV
11	Honors *AP Language & Composition	Honors Functions	Honors Physics Honors Earth Science *AP Biology *AP Chem .	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 *AP Language & Composition *AP Literature & Composition	Essentials of Calculus *AP Calc AB *AP Calc BC *AP Statistics	*AP Biology *AP Physics *AP Chem	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 Algebra III Trig	Physics or Earth Science	Academic Modern US History
12	Academic ELA 12	Academic Functions Statistics	Elective	Academic World History

CORE CLASSES

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

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

ADDITIONAL PROGRAMS

MONROE CAREER & TECHNICAL INSTITUTE (MCTI)

The career and technical program begins in the tenth grade. Competitive admission quotas make it necessary for applicants to have a record of good conduct, attendance, and passing grades in their academic subjects before their application can be processed. (See Appendix-pg. 73)

FIELD EXPERIENCE ELECTIVE PROGRAM

The Field Experience Elective Program is designed to offer high school credit to students with paid jobs outside of school. Students are responsible for finding part-time employment with a local employer. Students are encouraged tp find jobs that are directly related to the career field they wish to pursue after graduating from high school. The Field Experience Elective Program is supervised by a Pocono Mountain Cyber Program Teacher.

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. Hybrid scheduling allows students to take classes through the Cyber Platform while enrolling in other classes in the traditional school building.

INDEPENDENT STUDY

Independent Studies Elective - The Independent Study Program is designed for students who have demonstrated a high degree of motivation and have the ability to work independently. To enroll in an independent study program, a student must have the approval of the teacher, the guidance counselor, and the high school principal. All students approved for an independent study must receive a percentage grade for the course.

SPECIAL EDUCATION

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

Gifted Education Philosophy

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

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

SPECIAL EDUCATION STATEMENT OF LEAST RESTRICTIVE ENVIRONMENT

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

CAREER PATHWAYS

Connecting Careers and Curriculum for Future Success

The knowledge and skills required to enter college or the workforce are constantly changing. As a result, readying today's students to take the next step in the world can become very demanding. Five Career Pathways were designed to help students focus on an area of interest and a possible career path. The career clusters were developed to relate occupations to broad industries. Within each cluster are several pathways, which provide a more focused category within that cluster. A career path is a broad spectrum of careers that share similar characteristics and for which employment requirements call for common interests, strengths and competencies. The Pocono Mountain School District is committed to preparing and assisting students to make good decisions about life after graduation from high school. The district has made recommendations for the 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 son or daughter 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 8th grade.
- 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

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 his or her 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 son or daughter's career plans as we strive to create opportunities for each student to experience meaningful career related opportunities during their high school years.

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

YOUR FUTURE IS YOUR CHOICE!

For a better future, a student should begin to:

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

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

This Career Planning Guide:

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

Pocono Mountain Career Pathways

Arts and Communication (AC)

What is Arts and Communication Pathway?

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

Areas of Focus

- AV Technology and Film (AVF)
- Performing Arts (PA)
- Visual Arts (VA)
- Journalism and Broadcasting (JB)

Some career areas in the ***Arts and Communication (AC)*** Pathway are:

Advertising	Actor/Actress
Artistic	Graphic Designer
Illustrator	Interior Designer
Journalist	Musician
Public Relations	Architecture

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

Business Finance & Information Technology (BIT)

What is the Business Finance and Information Technology Pathway?

The Business and Management 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, International Business, Computer Science Courses, Office Technology Courses, Introduction to STEM, Introduction to Engineering Design I and II, Statistics, AP Statistics, Calculus, and Yearbook.

Engineering & Industrial Technology (EIT)

What is the Engineering and Industrial Technology Pathway?

The Engineering and Industrial 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
	CAD Designer
Automotive Technician	Computer Engineer/Programmer
Network Administrator	Welder
CNC Machinist	Service Technician

Some courses that apply to ***Engineering & Industrial Technology (EIT)*** Pathway are: Introduction to Engineering Design I and II, Principles of Engineering Design I and II, AVIATION STEM, Statistics, AP Statistics, Calculus, Chemistry, Biology, Physics, CADD

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	All careers in Education
Law enforcement	Child Care Provider
Government Positions	Lawyer
Education	Military Careers

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

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, World of Foods, Psychology/Sociology, Math, Health, Science, Health Emergencies, Fitness/Sport Nutrition, Strength and Conditioning, Human Anatomy, Introduction to Engineering Design I and II, Principles of Engineering Design I and II, AVIATION STEM, Statistics, Calculus, Chemistry, Biology, Physics, and CADD.

ARTS AND COMMUNICATION COURSE OF STUDY

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

9th		10th		11th		12th	
* English Language Arts	Academic or Honors 9	* English Language Arts	Academic or Honors 10	* English Language Arts	Academic, Honors 11 or **AP Language & Comp	* English Language Arts	ELA, Academic, Honors 12 or AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H)	*Math	Algebra I B/Algebra IB Enhancement Geometry (Ac) Algebra II (Ac/H)	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Functions (Ac/H)	*Math	Geometry Statistics Functions (Ac/H) Essentials of Calculus (H) **AP Calculus AB, BC **AP Statistics
*Science	Contemporary Integrated Science Biology Intro to STEM	*Science	**AP Biology Chemistry or General Physical Science Intro to STEM	*Science	**AP Chemistry Physics or Earth Science Human Anatomy Intro to STEM	*Science	**AP Physics Intro to STEM
*Social Studies	**AP Human Geography	*Social Studies	Civics	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP World History
*Health	PE/PE					*Health	PE/PE
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

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	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)

**High Priority Occupations – Job categories that are in demand by employers, have higher skill needs and are most likely to provide family-sustaining wages.*

BUSINESS FINANCE AND INFORMATION TECHNOLOGY COURSE OF STUDY

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

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	ELA, Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H)	*Math	Algebra I B/Algebra IB Enhancement Geometry (Ac) Algebra II (Ac/H)	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Functions (Ac/H)	*Math	Geometry Statistics Functions (Ac/H) Essentials of Calculus (Ac) **AP Calculus AB, BC **AP Statistics
*Science	Contemporary Integrated Science Biology Intro to STEM	*Science	**AP Biology Chemistry or General Physical Science Zoology Intro to STEM	*Science	**AP Chemistry Physics or Earth Science Human Anatomy Intro to STEM	*Science	**AP Physics Intro to STEM
*Social Studies	**AP Human Geography	*Social Studies	Civics	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP World History
*Health	PE/PE					*Health	PE/PE
(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

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

ENGINEERING AND INDUSTRIAL TECHNOLOGY (EIT) PATHWAY

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

Are you interested in…	Can you…	Do you enjoy…
Building and Construction 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)		

**High Priority Occupations* – *Job categories that are in demand by employers, have higher skill needs and are most likely to provide family-sustaining wages.*

ENGINEERING AND INDUSTRIAL TECHNOLOGY COURSE OF STUDY

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

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	ELA, Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H)	*Math	Algebra I B/Algebra IB Enhancement Geometry (Ac) Algebra II (Ac/H)	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Functions (Ac/H)	*Math	Geometry Statistics Functions (Ac/H) Essentials of Calculus (H) **AP Calculus AB, BC **AP Statistics
*Science	Contemporary Integrated Science Biology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II	*Science	**AP Biology Chemistry or General Physical Science Zoology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II	*Science	**AP Chemistry Physics or Earth Science Human Anatomy Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II	*Science	**AP Physics Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II
*Social Studies	**AP Human Geography	*Social Studies	Civics	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or **AP European History or AP world History
*Health	PE/PE	**Introduction to CAD **Design and Problem Solving		**Introduction to CAD **Manufacturing Technology		*Health	PE/PE
(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

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

HUMAN SERVICES PATHWAY

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

Are you interested in…	Can you…	Do you enjoy…
Working with People 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 Inter-personal 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) Chauffer (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)

******High Priority Occupations* *– Job categories that are in demand by employers, have higher skill needs and are most likely to provide family-sustaining wages.*

HUMAN SERVICES COURSE OF STUDY

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

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	ELA, Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H)	*Math	Algebra I B Geometry (Ac) Algebra II (Ac/H)	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Functions (Ac/H)	*Math	Geometry Statistics Functions (Ac/H) Essentials of Calculus (H) **AP Calculus AB, BC **AP Statistics
*Science	Contemporary Integrated Science Biology Intro to STEM	*Science	AP Biology Chemistry or General Physical Science Zoology Intro to STEM	*Science	AP Chemistry Physics or Earth Science Human Anatomy Intro to STEM	*Science	AP Physics AP Biology AP Chemistry Intro to STEM
*Social Studies	**AP Human Geography	*Social Studies	Civics	*Social Studies	Modern US History or **AP US History	*Social Studies	World History or AP European History AP World History AP Human Geography AP US History
*Health	PE/PE	**Introduction to CAD **Design and Problem Solving		**Introduction to CAD **Manufacturing Technology		*Health	PE/PE
(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

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

SCIENCE AND HEALTH (SH) PATHWAY

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

Are you interested in…	Can you…	Do you enjoy…
Health Care Environment 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 Making a contribution 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)

******High Priority Occupations*** *– Job categories that are in demand by employers, have higher skill needs and are most likely to provide family-sustaining wages.*

SCIENCE AND HEALTH COURSE OF STUDY

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

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	ELA, Academic or Honors 12 AP Lit & Comp **AP Lang. & Comp
*Math	Algebra I A Algebra I (Ac) Geometry (AC/H)	*Math	Algebra IB/Algebra IB Enhancement Geometry (Ac) Algebra II (Ac/H)	*Math	Algebra II Algebra II (Ac) Algebra III/ Trig Statistics Functions (Ac/H)	*Math	Geometry Statistics Functions (Ac/H) Essentials of Calculus (H) **AP Calculus AB, BC **AP Statistics
*Science	Contemporary Integrated Science Biology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I	*Science	**AP Biology Chemistry or General Physical Science Zoology Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II	*Science	**AP Chemistry Physics or Earth Science Human Anatomy Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II	*Science	AP Physics AP Biology AP Chemistry Intro to STEM Intro to Engineering Design I Intro to Engineering Design II Aviation STEM Principles of Engineering I/II
*Social Studies	AP Human Geography	*Social Studies	Civics	*Social Studies	Modern US History or AP US History	*Social Studies	World History or AP European History or AP World History
*Health	PE/PE	Health Emergencies Fitness/Sport Nutrition & Physiology Healthy Lifestyle Management Movement & Sport Related Fitness Strength and Conditioning Wellness and Fitness		Health Emergencies Fitness/Sport Nutrition & Physiology Healthy Lifestyle Management Movement & Sport Related Fitness Strength and Conditioning Wellness and Fitness		*Health	PE/PE
(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

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

COURSE DESCRIPTIONS

ART

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.

INTRODUCTION TO ART (ART DESIGN/APPRECIATION) 0.50 credit

Covering art appreciation and the beginning of art history, this course encourages students to gain an understanding and appreciation of art in their everyday lives. Presented in an engaging format, this one semester course provides an overview of many introductory themes: the definition of art, the cultural purpose of art, visual elements of art, terminology and principles of design, and two- and three-dimensional media and techniques. Tracing the history of art, high school students enrolled in the course also explore the following time periods and places: prehistoric art, art in ancient civilizations, and world art before 1400.

ART HISTORY 0.50 credit

Introducing art within historical, social, geographical, political, and religious contexts for understanding art and architecture through the ages, this course offers high school students an in-depth overview of art throughout history, with lessons organized by chronological and historical order and world regions. Students enrolled in this one-semester course cover topics including early Medieval and Romanesque art; art in the twelfth, thirteenth, and fourteenth centuries; fifteenth-century art in Europe; sixteenth-century art in Italy; the master artists; High Renaissance and Baroque art; world art, which includes the art of Asia, Africa, the Americas, and the Pacific cultures; eighteenth and nineteenth-century art in Europe and the Americas; and modern art in Europe and the Americas.

DRAWING I 0.50 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 0.50 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.

STUDIO ART I 0 .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 0 .50 credit

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.

BUSINESS, COMPUTERS AND TECHNOLOGY

The Business & 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 technological opportunities, and a learning track for students interested in computer science.

INTRODUCTION TO BUSINESS 0.50 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.

SMALL BUSINESS MANAGEMENT 0.50 credit

This course teaches the skills and key business concepts students need to know to plan and launch a business. Students learn about real-life teen entrepreneurs; characteristics of successful entrepreneurs; pros and cons of self-employment; sales stages, opportunities and strategies; planning and budgeting; and interpersonal communication in the workplace. Students also learn how to generate business ideas; create a business plan, mission, and vision; promote and market a company; attract investors; manage expenses; and set personal visions and goals. Topics include exploring factors of business success and failure; core business concepts; economic systems; competition; production; the global economy; financing a business; costs, pricing, and accounting; bookkeeping and financial reporting; the role of the government in business; regulations and laws; working with others; and successfully managing employees.

BUSINESS LAW 0.50 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.

PERSONAL FINANCE (Grade 12) 0.25 credit

This course prepares students to be financially responsible, engaging students in budgeting, planning, and being a smart consumer. Students learn about the relationship between education, employment, income, and net worth, and they plan for the cost of college. Students then broaden their study to include banking, spending, investing, and other money management concepts before exploring credit and debt. Students study microeconomics and entrepreneurship, with an overview of economic systems, supply and demand, consumer behavior and incentives, and profit principles.

CAREER PLANNING AND DEVELOPMENT 0.50 credit

This course helps students investigate careers as they apply to personal interests and abilities, develop skills and job search documents needed to enter the workforce, explore the rights of workers and traits of effective employees, and address the importance of professionalism and responsibility as careers change and evolve. This one-semester course includes lessons in which students create a self-assessment profile, a cover letter, and a résumé that can be used in their educational or career portfolio.

STRATEGIES FOR ACADEMIC SUCCESS 0.50 credit

Offering a comprehensive analysis of different types of motivation, study habits, and learning styles, this course encourages high school and middle school students to take control of their learning by exploring varying strategies for success. Providing engaging lessons that will help students identify what works best for them individually, this one-semester course covers important study skills, such as strategies for taking high-quality notes, memorization techniques, test-taking strategies, benefits of visual aids, and reading techniques.

DIGITAL CITIZENSHIP 0.50 credit

Students develop essential study skills for academic success, such as staying organized, managing time, taking notes, applying reading strategies, writing strong papers, and researching and properly citing information. Instruction on how to be a responsible online learner is threaded throughout the course, and these skills are directly addressed in lessons on cyberbullying, staying safe online, and learning how to be a digital leader. By the end of the course, students will have the tools they need to be academically successful in both traditional and digital learning environments.

COMPUTER LITERACY (REMEDIAL) 0.25 credit

This course reviews the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the field of IT.

ESSENTIAL COMPUTER AND APPLICATION SKILLS 0.50 credit

This course introduces students to the features and functionality of Microsoft® Office®. Through video instruction, interactive skills demonstrations, and hands-on practice assignments, students learn to develop, edit and share Office® 2010 documents for both personal and professional use. Students will develop proficiency in the most common tools and features of the Microsoft Office suite of applications.

BUSINESS COMPUTER INFORMATION SYSTEMS 1.0 credit

Business Computer Information Systems is a year-long course that explores the use of technology applications in both business and personal situations. The course provides key knowledge and skills in the following areas: communication, business technology, word processing, spreadsheet, and database applications, telecommunications, desktop publishing, and presentation technology, computer networks, and computer operating systems.

TECHNOLOGY AND BUSINESS 0.50 credit

This year-long course teaches students technical skills, effective communication skills, and productive work habits needed to make a successful transition into the workplace or postsecondary education. In this course, students gain an understanding of emerging technologies, operating systems, and computer networks. In addition, they create a variety of business documents, including complex word-processing documents, spreadsheets with charts and graphs, database files, and electronic presentations.

FUNDAMENTALS OF COMPUTER SYSTEMS 0.50 credit

Fundamentals of Computer Systems is a semester-long high school course that provides students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills provide students with the ability to configure computers and solve computer problems. Students learn details about the different elements of computers and computer systems, how to identify hardware devices and their functions, the role of operating systems as well as how to install and customize Windows operating system. Students also learn about networking and the Internet, security issues, and current software applications, such as Microsoft® Office. In addition, students learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in Windows operating system. Lastly, students learn the basics of customer service and working as a help desk support technician.

FUNDAMENTALS OF DIGITAL MEDIA 0.50 credit

Fundamentals of Digital Media is a semester-long course that presents high school students an overview of the different types of digital media and how they are used in the world today. This course examines the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces several different career paths related to digital media. Students learn about the tools used as well as best practices employed for creating digital media. In the course, students explore topics such as the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students also review the ethics and laws that impact digital media use or creation.

INTRODUCTION TO CODING 0.50 credit

Intro to Coding covers a basic introduction to the principles of programming, including algorithms and logic. Students engage in hands-on programming tasks in the Python programming language as they write and test their own code using the approaches real programmers use in the field. Students will program with variables, functions and arguments, and lists and loops, providing a solid foundation for more advanced study as well as practical skills they can use immediately.

INTRODUCTION TO INFORMATION TECHNOLOGY 0.50 credit

This course introduces students to the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students © Copyright Edgenuity, Inc. PAGE 29 Career and Technical Education Courses gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the field of IT.

INTRODUCTION TO INFORMATION TECHNOLOGY SUPPORT AND SERVICES 0.50 credit

This semester-long course focuses on real-world application, including common industry best practices and specific vendors that offer tools for technicians, project managers, and IT leadership. Students learn how the IT department of an enterprise supports the overall mission of the company. Students apply their knowledge of hardware and software components associated with IT systems while exploring a variety of careers related to IT support and services. Students analyze technical support needs to perform customer service and configuration management activities. Students also evaluate application software packages and emerging software. Students demonstrate and apply knowledge of IT analysis and design by initiating a system project and evaluating applications within the IT system.

INTRODUCTION TO NETWORK SYSTEMS 0.50 credit

This semester-long course introduces students to the fundamental technology and concepts that make networking systems possible. The most important concept introduced is that of the OSI reference model and its bottom four layers, which are most directly concerned with networking instead of computing. The course explores the software and hardware supporting LANs, WANs, and Wi-Fi networks. Students are introduced to the protocols in the TCP/IP stack that are used to communicate across a network, and to networking hardware, including hubs, switches, bridges, routers, and transmission media. Students explore questions of security, network management, and network operating systems.

NETWORK SYSTEM DESIGN 0.50 credit

Network System Design is a semester-long course that provides students with an understanding of computer networks and how they operate, as well as a basic understanding of how to manage and maintain computer networks. These skills provide students with the ability to design, configure, and troubleshoot networks of all sizes. Students learn the basics of network design, including how to identify network requirements and determine proper network architecture. Students are introduced to network models. Students also learn about internet protocol and the basics of routing data on a network. Students learn about network security issues and network management. Lastly, students learn about network operating systems and their role in connecting computers and facilitating communications.

NEW APPLICATIONS: WEB DEVELOPMENT IN THE 21ST CENTURY 0.50 credit

New Applications is a survey course that travels from the first software programs developed to facilitate communication on the Internet, to the new generation of mobile and native apps that access the Internet without a reliance on a web browser. New Applications is also a practical course in how to develop a presence on the World Wide Web using WordPress and other available web application tools. The goal of the course is to provide the learner insight into the rapidly evolving universe of programming and application development to support informed career decisions in an industry that is changing as quickly as it is growing.

ENGLISH LANGUAGE ARTS (ELA)

The English Language Arts Curriculum, a total Language Arts Program, provides the targets for instruction and student learning essential for success in all academic areas. The ELA program represents the five components essential for successful Language Arts development: phonemic awareness, phonics, fluency, vocabulary and comprehension. The ELA program is researched based and follows sequential skill development commencing with the foundation skills in grades 6 -8, comprised of informational text, literature, writing, speaking and listening. Mastery of the PA Core Standards is the driving force ensuring that all students are moving forward on the staircase of complexity from kindergarten through twelfth grade. The **Advanced Placement Literature and Composition and Advanced Placement Language and Composition** courses are offered to juniors and seniors who qualify and express interest.

ENGLISH AS A SECOND LANGUAGE ESL 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 .50 credit

Prerequisite for admission to Elements of Literacy - Students are selected based upon teacher recommendation and assessment results.

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 0.50 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.

ACADEMIC ENGLISH LANGUAGE ARTS (ELA) 9 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.

HONORS ENGLISH LANGUAGE ARTS (ELA) 9 1.0 credit

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 ENGLISH LANGUAGE ARTS (ELA) 10 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.**

HONORS ENGLISH LANGUAGE ARTS (ELA) 10 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. **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 ENGLISH LANGUAGE ARTS (ELA) 11 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. This course will offer additional support to students as needed.

HONORS ENGLISH LANGUAGE ARTS (ELA) 11 1.0 credit

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.

AP LANGUAGE AND COMPOSITION 1.0 credit

Grade 11 (12^{th} grade elective only)
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.

ACADEMIC ENGLISH LANGUAGE ARTS (ELA) 12 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. This course will offer additional support to students as needed.

HONORS ENGLISH LANGUAGE ARTS (ELA) 12 1.0 credit

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.

AP LITERATURE AND COMPOSITION 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.

KEYSTONE Literature Tutorial (Grades 11, 12) 0.50 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 course 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. This course also offers diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills. Ongoing assessment will tailor instruction and accelerate learning.

Successful completion of the Keystone Literature Tutorial course may fulfill the required ELA 10 course credit. Proficiency on the Keystone Literature exam retest or successful completion of the Keystone Literature Tutorial course will meet the local graduation requirement.

ELA ELECTIVES

EXPOSITORY READING AND WRITING 0.50 credit

This elective English course is designed to develop critical reading and writing skills while preparing high school students to meet the demands of college-level work. While students will explore some critical reading skills in fiction, poetry, and drama the focus of this course will be on expository and persuasive texts and the analytical reading skills that are necessary for college success. Students will read a range of short but complex texts, including works by Walt Whitman, Abraham Lincoln, Cesar Chavez, Martin Luther King Jr., Langston Hughes, Julia Alvarez, Edna St. Vincent Millay, and Gary Soto.

SPEECH COMMUNICATION I 0.50 credit

Beginning with an introduction that builds student understanding of the elements, principles, and characteristics of human communication, this course offers fascinating insight into verbal and nonverbal messages and cultural and gender differences in the areas of listening and responding. High school students enrolled in this one-semester course will be guided through engaging lectures and interactive activities, exploring themes of self-awareness and perception in communication. The course concludes with units on informative and persuasive speeches, and students are given the opportunity to critique and analyze speeches.

WRITER'S WORKSHOP I 0.50 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 0.50 credit

Motivating students in grades nine through twelve to become more articulate and effective writers, these one-semester courses offers hands-on experience writing personal reflections, definition essays, research essays, persuasive essays, informative essays, and literary analysis essays. Offering targeted lessons on reputable research, effective communication, solid grammar, and compelling style, this one-semester course utilizes the Six Traits of Effective Writing as an overarching framework. Students enrolled in this course develop the skills necessary to evaluate their own writing and articulate and apply writing and researching strategies. In addition, students get further practice applying the grammatical rules of Standard American English in formal writing.

LITERATURE/COMPOSITION I 0.50 credit

This course is one of two, semester-long intervention courses designed to support the development of strategic reading and writing skills. These courses use a thematic and contemporary approach, including high-interest topics to motivate students and expose them to effective instructional principles using diverse content area and real-world texts. Both courses offer an engaging technology based interface that inspires and challenges students to gain knowledge and proficiency in the following comprehension strategies: summarizing, questioning, previewing and predicting, recognizing text structure, visualizing, making inferences, and monitoring understanding with metacognition. Aimed at improving fluency and vocabulary, self-evaluation strategies built into these courses inspire students to take control of their learning.

LITERATURE/COMPOSITION II 0.50 credit
Prerequisite: Successful completion of Literature/Composition I

Offering high-interest topics to motivate students who are reading two to three levels below grade, this course works in conjunction with Literacy & Comprehension I to use a thematic and contemporary approach to expose students to effective instructional principles using diverse content area and real-world texts. Presented as two, one-semester, reading-intervention courses, each offers an engaging, technology-based interface that inspires and challenges high school and middle school students to gain knowledge and proficiency in the following comprehension strategies: summarizing, questioning, previewing and predicting, recognizing text structure, visualizing, making inferences, and monitoring understanding with metacognition. Aimed at improving fluency and vocabulary, self-evaluation strategies built into these courses inspire students to take control of their learning.

CLASSIC AUTHORS AND NOVELS I/II 0.50 credit

The Classic Novels mini-courses give students the opportunity to fully explore a large work of fiction or to be introduced to a celebrated author. Designed to stand alone or to be inserted into an existing Edgenuity course, each mini-course guides students through the work with lectures, web activities, journals, and homework/practice. Students study the following novels: 1984, A Midsummer Night's Dream, Call of the Wild, Dr. Jekyll and Mr. Hyde, Heart of Darkness, Jane Eyre, Macbeth, Mrs. Dalloway, Portrait of the Artist, Robinson Crusoe, The House of Seven Gables, The Red Badge of Courage, and The Three Musketeers along with the following author studies: Jorge Luis Borges and Flannery O'Connor.

HEALTH EDUCATION

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. 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 GRADES 7 and 8

This middle school Health course introduces students to the concepts of what good health is, why good health is important, and what students should do in order to achieve good health. By the end of this course, students will be able to demonstrate an awareness of health as it applies to their bodies, minds, and environment; identify the components of a healthy lifestyle; set reasonable wellness goals; and apply health concepts across multiple contexts.

HEALTH GRADE 9 _____ 0.25 credit

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, child birth, abstinence (is promoted and defined as the most effective means of preventing pregnancy and Sexually Transmitted Infections), decision making, and social/personal skills. Students will be provided with up-to-date skills and knowledge relevant to today's rapidly changing society.

HEALTH GRADE 12 0.25 credit

Accurate up-to-date health information will be taught pertaining to Substance Abuse Prevention, Family/Personal/Social Health, Disease Prevention and Control, Mental Health, and Human Growth and Development. The course will include classroom experiences that help students acquire the knowledge, attitudes and skills necessary for making health promoting decision, achieving health literacy, adopt health enhancing behaviors and promoting health in other. 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, sport, 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 "Fitness gram/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.

Grade 7 and 8

Physical Education contributes to the physical, intellectual, social and emotional well-being of the student. Physical Education includes an activity log with an expectation of a minimum of 90 minutes (3 – 30 minute sessions) of documented physical activity per five days of school weekly. The curriculum is devoted to promoting activities that promote a positive self-concept by engaging in activities such as 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.

Grade 9 and 12 0.75 credit

Physical Education contributes to the physical, intellectual, social and emotional well-being of the student. Physical Education includes an activity log with an expectation of a minimum of 90 minutes (3 – 30 minute sessions) of documented physical activity per five days of school weekly. The curriculum is devoted to promoting activities that promote a positive self-concept by engaging in activities such as 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.

HEALTH AND PHYSICAL EDUCATION ELECTIVES

PROMOTING WELLNESS 0.50 credit

This course provides students the opportunity to expand their knowledge of wellness in a unique way. Students will spend time learning about self-awareness, stress reduction/management, personal and social skills development, nutrition, fitness concepts, meditation and relaxation techniques. The course is designed for all students who have the desire to live a healthy or healthier lifestyle. Wellness is an active process of becoming aware of and making choices toward a healthy and fulfilling life. "...a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." - The World Health Organization. The focus of this course is to increase knowledge of the specific benefits of living a healthy lifestyle.

WELLNESS & FITNESS 0.50 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.

CONCEPTS OF HEALTH I 0.50 credit

Concepts of Health I is an in-depth look at important concepts related to how the body functions. Topics covered will be Genetics, Cells, Tissues, Organs and Systems, Diseases and Disorders, and Anatomy of the Body.

CONCEPTS OF HEALTH II 0.50 credit

Prerequisite - Concepts of Health 1

Concepts of Health 2 is an in- depth look at the body systems, structure and function, diseases and disorders, as well as career choices for each system discussed.

CONTEMPORARY HEALTH 0.50 credit

Semester-long course, this high-school health offering examines and analyzes various health topics. It places alcohol use, drug use, physical fitness, healthy relationships, disease prevention, relationships and mental health in the context of the importance of creating a healthy lifestyle. Throughout the course, students examine practices and plans they can implement in order to carry out a healthy lifestyle, and the consequences they can face if they do not follow safe practices. In addition, students conduct in-depth studies in order to create mentally and emotionally healthy relationships with peers and family, as well as nutrition, sleeping, and physical fitness plans. Students also examine and analyze harassment and bullying laws. This course takes covers issues of sex and gender identity, same-sex relationships, contraception, and other sensitive topics. For a more conservative approach to health education, the Healthy Living course is also available in the Health and Physical Education Bundle.

HEALTHY LIVING 0.50 credit

Encouraging students to make responsible, respectful, informed, and capable decisions about topics that affect the well-being of themselves and others, this high school course provides students with comprehensive information they can use to develop healthy attitudes and behavior patterns. Available as either a semester or year-long course, this informative and engaging course encourages students to recognize that they have the power to choose healthy behaviors to reduce risks.

LIFETIME FITNESS 0.50 credit

Exploring fitness topics such as safe exercise and injury prevention, nutrition and weight management, consumer product evaluation, and stress management, this course equips high school students with the skills they need to achieve lifetime fitness. Available as either a semester or year-long course, Lifetime Fitness encourages students to assess individual fitness levels according to the five components of physical fitness: cardiovascular health, muscular strength, muscular endurance, flexibility, and body composition. Personal fitness assessments encourage students to design a fitness program to meet their individual fitness goals.

MATHEMATICS

Overview: 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. 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.

KEYSTONE ALGEBRA I TUTORIAL 0.50 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 1.0 credit

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 1.0 credit

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 FUNCTIONS 1.0 credit

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

ESSENTIALS OF CALCULUS 1.0 credit
Grade 12

Students will expand their understanding of functions and the role they play in investigating real-world phenomena. The central ideas of calculus involve limit, rate of change, and slope of a tangent line. Essentials of Calculus will help prepare students to take Calculus in college.

AP CALCULUS AB 1.0 credit

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

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

AP STATISTICS 1.0 credit

Grade 12

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

STATISTICS 1.0 credit

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. Statics focuses on the introduction of the study of statistics and probability. The course will include topics such as basic probability, odds, descriptive statistics (measure 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

ACADEMIC ALGEBRA I 1.0 credit

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 1.0 credit

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 1.0 credit

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 1.0 credit

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

ACADEMIC FUNCTIONS 1.0 credit

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

COLLEGE ALGEBRA 1.0 credit

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

CORE PROGRAM

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

ALGEBRA IA 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 IA Enhancement 0.50 credit

Algebra IA Enhancement reviews and reteaches the content from Algebra IA and covers the same topics as the first half of the Algebra I curriculum including the study of properties of rational numbers, ratio, proportion, the rectangular coordinate system, and solving first degree equations and inequalities. Making connections between equations, tables, and graphs of linear equations will be introduced in this course. By associating 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 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 IB ENHANCEMENT 0.50 credit

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

GEOMETRY 1.0 credit

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 1.0 credit

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.

SCIENCE

Overview: 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 0.50 credit

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 fulfil 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 1.0 credit

Honors Biology covers biological systems in more detail. Topics covered include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution, and ecology. Concepts taught in Honors Biology are more in depth and stress independent preparation. ***Note: All students enrolled in this course are required to take the Keystone Exam.***

HONORS CHEMISTRY 1.0 credit

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

HONORS EARTH SCIENCE 1.0 credit

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

HONORS PHYSICS 1.0 credit

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

ADVANCED PLACEMENT (AP) SCIENCE COURSES (ELECTIVE OFFERINGS)

AP BIOLOGY 1.0 credit

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.

ACADEMIC PROGRAM

BIOLOGY 1.0 credit

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

CHEMISTRY 1.0 credit

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

EARTH SCIENCE 1.0 credit

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

PHYSICS 1.0 credit

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

CORE PROGRAM

CONTEMPORARY INTEGRATED SCIENCE 1.0 credit

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

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

BIOLOGY 1.0 credit

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

GENERAL PHYSICAL SCIENCE 1.0 credit

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 1.0 credit

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

ENVIRONMENTAL SCIENCE I 0.50 credit

This course examines the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, this course covers the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.

ENVIRONMENTAL SCIENCE II 0.50 credit
Prerequisite: Environmental Science I

This course will expand upon the mutual relationships between organisms and their environment. Topics covered include ecological processes, the impact of humans on natural systems and the development of practices that will ensure sustainable systems.

AEROSPACE I 0.50 credit

Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth as well as into outer space.

AEROSPACE II 0.50 credit

Aerospace II courses will continue to explore the connection between meteorology, astronomy, and flight across the around the earth as well as into outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics may include the history of aviation, principles of aeronautical decision-making, airplane systems, aerodynamics, and flight theory.

FORENSICS: USING SCIENCE TO SOLVE A MYSTERY 0.50 credit

Forensics: Using Science to Solve a Mystery is a semester-long high school course that overviews modern-day forensic science careers at work using science concepts to collect and analyze evidence and link evidence to the crime and suspects in order to present admissible evidence in courts of law. Projects in this course include simulated crime-scene investigation, actual DNA separation, development of a cybersecurity plan, and the identification of specific forensic skills used during the course of a very large murder case. The focus of this course is to assist students in making career choices. The overview of careers includes job descriptions and availability, educational and training requirements, licensing and certification, and typical annual salaries. Students who take this class will become equipped to make more informed career choices regarding the forensic, computer science and medical science fields. At the same time, students will survey the history and scope of present-day forensic science work.

INTRODUCTION TO STEM 0.50 credit

This semester-long course introduces students to the four areas of Science, Technology, Engineering, and Mathematics through an interdisciplinary approach that will increase awareness, build knowledge, develop problem solving skills, and potentially awaken an interest in pursuing a career in STEM. Students are introduced to the history, fundamental principles, applications, processes, and concepts of STEM. Students are exposed to several computer applications used to analyze and present technical or scientific information. Finally, students explore the kinds of strategies frequently used to solve problems in these disciplines. Throughout the course, students discover their strengths through practical applications and awareness of the various STEM careers.

STEM AND PROBLEM SOLVING 0.50 credit

Science, technology, engineering, and mathematics (STEM) are active components in the real world. STEM and Problem Solving is a semester-long high school course that outlines how to apply the concepts and principles of scientific inquiry, encouraging the use of problem-solving and critical-thinking skills to produce viable solutions to problems. Students learn the scientific method, how to use analytical tools and techniques, how to construct tests and evaluate data, and how to review and understand statistical information. This course is designed to help students understand © Copyright Edgenuity, Inc. PAGE 33 Career and Technical Education Courses what we mean by problem solving and to help understand and develop skills and techniques to create solutions to problems. Advanced problem-solving skills are necessary in all science, technology, engineering, and mathematics disciplines and career paths. This problem-solving course stresses analytic skills to properly format problem statements, use of the scientific method to investigate problems, the use of quantitative and qualitative approaches to construct tests, and an introduction to reviewing and interpreting statistical information.

ENGINEERING AND DESIGN 0.50 credit

This semester-long course focuses on building real-world problem solving and critical thinking skills as students learn how to innovate and design new products and improve existing products. Students are introduced to the engineering design process to build new products and to the reverse engineering process, which enables engineers to adjust any existing product. Students identify how engineering and design have a direct impact on the sustainability of our environment and the greening of our economy. Finally, students incorporate the engineering design process, environmental life cycle, and green engineering principles to create a decision matrix to learn how to solve environmental issues.

ENGINEERING AND PRODUCT DEVELOPMENT 0.50 credit

This semester-long course provides an overview of the concepts of product engineering and development. Students analyze the life cycle of a product to prepare a product for distribution and for target markets. The course begins with building an understanding of the product life cycle, from the initial idea to drafting requirements to using 3-D modeling tools and other design tools. The final unit focuses on assembling the pieces within a project plan to achieve a product and evaluating the plans for a successful product launch. In addition, the course provides information about the different careers available to students interested in engineering, product development, and project management.

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 1.0 credit
Grade 10

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 1.0 credit

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 1.0 credit

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 1.0 credit

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

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

AP UNITED STATES HISTORY 1.0 credit

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 WORLD HISTORY 1.0 credit

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 1.0 credit

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

ACADEMIC PROGRAM

CIVICS 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.

ACADEMIC MODERN U.S. HISTORY 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.

ACADEMIC WORLD HISTORY 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.

CORE PROGRAM

CIVICS 1.0 credit
Grade 10

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

MODERN U.S. HISTORY 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. This course will provide additional support to students as needed.

WORLD HISTORY 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. This course will provide additional support to students as needed.

SOCIAL STUDIES ELECTIVES

ECONOMICS 1.0 credit

This two-semester course invites students to broaden their understanding of how economic concepts apply to their everyday lives— including microeconomic and macroeconomic theory and the characteristics of mixed-market economies, the role of government in a free-enterprise system and the global economy, and personal finance strategies. Throughout the course, students apply critical thinking skills while making practical economic choices. Students also master literacy skills through rigorous reading and writing activities. Students analyze data displays and write routinely and responsively in tasks and assignments that are based on scenarios, texts, activities, and examples. In more extensive, process-based writing lessons, students write full-length essays in informative and argumentative formats.

INTRODUCTION TO HUMAN GEOGRAPHY 1.0 credit

Examining current global issues that impact our world today, this course takes a thematic approach to understanding the development of human systems, human understanding of the world, and human social organization. Divided into two semesters, this high school course will challenge students to develop geographic skills, including learning to interpret maps, analyze data, and compare theories.

Offering interactive content that will grow students' understanding of the development of modern civilization and human systems— from the agricultural revolution to the technological revolution—this course encourages students to analyze economic trends as well as compare global markets and urban environments.

PSYCHOLOGY 1.0 credit

This two-semester course introduces high school students to the study of psychology and helps those master fundamental concepts in research, theory, and human behavior. Students analyze human growth, learning, personality, and behavior from the perspective of major theories within psychology, including the biological, psychosocial, and cognitive perspectives. From a psychological point of view, students investigate the nature of being human as they build a comprehensive understanding of traditional psychological concepts and contemporary perspectives in the field. Course components include an introduction to the history, perspectives, and research of psychology; an understanding of topics such as the biological aspects of psychology, learning, and cognitive development; the stages of human development; aspects of personality and intelligence; the classification and treatment of psychological disorders; and psychological aspects of social interactions.

SOCIOLOGY 1.0 credit

Providing insight into the human dynamics of our diverse society, this is an engaging, two-semester course that delves into the fundamental concepts of sociology. This interactive course, designed for high school students, covers cultural diversity and conformity, basic structures of society, individuals and socialization, stages of human development as they relate to sociology, deviance from social norms, social stratification, racial and ethnic interactions, gender roles, family structure, the economic and political aspects of sociology, the sociology of public institutions, and collective human behavior, both historically and in modern times.

WORLD LANGUAGES

Overview: 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.

SPANISH I, FRENCH I, GERMAN I 1.0 credit

Level I students will be introduced to basic vocabulary needed in order to communicate with foreign speakers. All information taught is that which deals with the real world and covers topics such as friends, dating, school, and sports. Students begin to compare cultures and examine ways in which customs in the United States differ from those of other countries.

SPANISH II, FRENCH II, GERMAN II 1.0 credit

Prerequisites: Spanish I, French I, or 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.

SPANISH III, FRENCH III, GERMAN III 1.0 credit

Prerequisites: Spanish II, French II, or German II

In this expanding engagement with foreign language, high school students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. In addition, students read significant works of literature in the foreign language, and respond orally or in writing to these works. Continuing the pattern, and building on what students encountered in the first two years, each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major areas in Europe and the Americas.

JUNIOR HIGH PROGRAM

GRADES 7 – 8

ENGLISH LANGUAGE ARTS

The English Language Arts Curriculum, a total Language Arts Program, provides the targets for instruction and student learning essential for success in all academic areas. The ELA program represents the five components essential for successful Language Arts development: phonemic awareness, phonics, fluency, vocabulary and comprehension. The ELA program is researched based and follows sequential skill development commencing with the foundation skills in grades 7 -8, comprised of informational text, literature, writing, speaking and listening. Mastery of the PA Core Standards is the driving force ensuring that all students are moving forward on the staircase of complexity from kindergarten through twelfth grade.

7th GRADE ENGLISH LANGUAGE ARTS

Students grow as readers, writers, and thinkers in this middle school course. With engaging literary and informational texts, students learn to think critically, analyze an author's language, and cite evidence to support ideas. Students complete an in-depth study of Jack London's classic novel *White Fang* and read excerpts from other stories, poetry, and nonfiction. Explicit modeling and ample opportunities for practice help students sharpen their vocabulary, grammar, and listening skills. Students also respond routinely to texts they have read. In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative formats. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

8TH GRADE ENGLISH LANGUAGE ARTS

In this course, students build on their knowledge and blossom as thoughtful readers and clear, effective writers. A balance of literary and informational texts engages students throughout the course in reading critically, analyzing texts, and citing evidence to support claims. Students sharpen their vocabulary, grammar, and listening skills through lessons designed to provide explicit modeling and ample opportunities to practice. Students also routinely write responses to texts they have read, and use more extensive, process based lessons to produce full-length essays in narrative, informative, analytical, and argumentative formats. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

MATHEMATICS

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 mathematics is relevant to their lives. Pocono Mountain School District wants students to think mathematics, to understand mathematics, and to use mathematics. If they can do this, our students will have the confidence and the desire to meet the challenges and opportunities of tomorrow.

7TH GRADE MATHEMATICS

In grade 7, instructional time should focus on four critical areas based on the Pennsylvania Core Mathematical Standards: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

8TH GRADE MATH - ESSENTIALS OF ALGEBRA

In grade 8, instructional time should focus on three critical areas based on the Pennsylvania Core Mathematical Standards: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

ACADEMIC ALGEBRA I

Prerequisite: teacher recommendation 1.0 credit

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. Students who meet the prerequisites may earn a graduation credit.***

SCIENCE

The Science program 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 their environment so they may think and act intelligently in a rapidly changing scientific world. Major consideration is given to the process of thinking, the concepts, and knowledge of the sciences, and laboratory experiences.

7th GRADE PHYSICAL SCIENCE

The middle school physical science course focuses on conservation of matter, conservation of energy, motion and forces, and energy. Students will work on developing skills in data recording, classifying, measuring, observing, hypothesizing, analyzing, evaluation and inferring.

8TH GRADE LIFE SCIENCE

Life Science is the study of cells, heredity, biological populations and their changes over time. It includes human biology, ecology, diversity of organisms and the history and nature of science. In this course students will have the opportunity to conduct and design experiments, identify and classify organisms. Students will work on developing skills in data recording, classifying, measuring, observing, hypothesizing, analyzing, evaluation and inferring.

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.

7TH GRADE WORLD GEOGRAPHY

The World Geography course will focus on exploring patterns and relationships throughout the world using the five themes of geography and economic reasoning within the context of world regional study. Geographic and economic research tools will be used in order to make decisions and problem solve. Major course strands include: government, economics, geography, and culture.

8TH GRADE EARLY US HISTORY

The Early US History course will focus on American history from the Exploration and Colonization period to the Reconstruction Period following the Civil War. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the development of the United States and the resulting impact on world history.

RELATED ARTS

HEALTH AND PHYSICAL EDUCATION

Health education in the Pocono Mountain School District is comprehensive, accurate, up-to-date and relevant. The health education curriculum provides all students with the skills and knowledge to promote responsible lifetime decision making and contribute to a healthy and safe society. Health choices and decision making are stressed. The program teaches students the skills necessary to weigh options, to make responsible decisions and to 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.

ART

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. The study of major artistic periods will be incorporated in the course offerings.

STRATEGIES FOR ACADEMIC SUCCESS

Offering a comprehensive analysis of different types of motivation, study habits, and learning styles, this course encourages high school and middle school students to take control of their learning by exploring varying strategies for success. Providing engaging lessons that will help students identify what works best for them individually, this one-semester course covers important study skills, such as strategies for taking high-quality notes, memorization techniques, test-taking strategies, benefits of visual aids, and reading techniques.

DIGITAL CITIZENSHIP

Students develop essential study skills for academic success, such as staying organized, managing time, taking notes, applying reading strategies, writing strong papers, and researching and properly citing information. Instruction on how to be a responsible online learner is threaded throughout the course, and these skills are directly addressed in lessons on cyberbullying, staying safe online, and learning how to be a digital leader. By the end of the course, students will have the tools they need to be academically successful in both traditional and digital learning environments.

WORLD LANGUAGE

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. *Students who meet the prerequisites may earn a graduation credit for Algebra 1, Spanish, French and/or German when taken in seventh or eighth grade.*

SPANISH I (Grades 7-8) 1.0 credit

Spanish I students will be introduced to basic vocabulary needed in order to communicate with foreign speakers. All information taught is that which deals with the real world and covers topics such as friends, dating, school, and sports. Students begin to compare cultures and examine ways in which customs in the United States differ from those of other countries.

SPANISH II (Grades 7-8) 1.0 credit

Prerequisites: Spanish 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.

GERMAN I (Grades 7-8) 1.0 credit

German I students begin their introduction to German with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Each unit consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major German-speaking areas in Europe.

FRENCH I (Grades 7-8) 1.0 credit

French I students 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.

ELEMENTARY PROGRAM

KDG – 6TH GRADE

Students in our K-6 Cyber Program participate through various learning options. Students may enroll in our district's cyber program full time, or participate in a variety of customized Hybrid options.

ELEMENTARY COURSE DESCRIPTIONS

FULL DAY OPTION

Students may take all traditional courses (Mathematics, ELA, Science, and Social Studies) through our online Learning Management System, Edgenuity.

HYBRID OPTION ONE
Morning Session in brick and mortar building.

Students attend their home school in the **morning**. They may take the bus to school and must be picked up after their academics for the morning are complete.

- Students may stay for Lunch with their peers.
- Students complete courses *not* taken at school through the cyber Learning Management System.

HYBRID OPTION TWO
Afternoon Session in brick and mortar building.

Students attend their home school in the **afternoon**. Students must be transported to school and are able take the bus to school home at the end of the school day.

- Students may arrive in time for Lunch with their peers.
- Students complete courses *not* taken at school through the cyber Learning Management System.

INCLUDED IN BOTH HYBRID OPTIONS

- Students may participate in all before and after school activities, including Band and Chorus.
- Students may attend all field trips and special events at school.
- Personalized learning plan customized for each student
- Students have full access to district resources and facilities, including guidance counseling and libraries

The Pocono Mountain School District Cyber Program strives to engage students in a highly motivational, student-centered educational program that relies on basic educational principles. It continues to incorporate the latest information and communications technology to promote student achievement and to foster higher-order thinking and problem-solving skills. Students have the opportunity to master essential content skills and to build a strong foundation enabling them to be successful throughout school.

K-6 MATHEMATICS

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 mathematics is relevant to their lives. Pocono Mountain School District wants students to think mathematics, to understand mathematics, and to use mathematics. If they can do this, our students will have the confidence and the desire to meet the challenges and opportunities of tomorrow.

K-6 ENGLISH LANGUAGE ARTS

The English Language Arts Curriculum, a total Language Arts Program, provides the targets for instruction and student learning essential for success in all academic areas. The ELA program represents the five components essential for successful Language Arts development: phonemic awareness, phonics, fluency, vocabulary and comprehension. The ELA program is researched based and follows sequential skill development commencing with the foundation skills in pre-k through 6, comprised of informational text, literature, writing, speaking and listening. Appropriate grade level resources support differentiated instruction and best practice. The needs of our student population are met through classroom instruction as well as specialized support services. Student progress is continually monitored through teacher observation and state and local assessments. Data teams ensure that all students, students needing remediation as well as those students functioning above grade level, continue to show growth. Mastery of the Pennsylvania core Standards is the driving force ensuring that all students are moving forward on the staircase of complexity from kindergarten through twelfth grade. The amplification of this ELA curriculum represents an evolved program ensuring all students will graduate college and career ready for success in the 21st century.

K-6 SCIENCE

The Science program 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 their environment so they may think and act intelligently in a rapidly changing scientific world. Major consideration is given to the process of thinking, the concepts, and knowledge of the sciences, and laboratory experiences.

K-6 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.

MCTI Program Guide 2021-2022

The Monroe Career and Technical Institute serves the East Stroudsburg, Pleasant Valley, Pocono Mountain, and Stroudsburg School Districts

See your Guidance Counselor
To inquire about enrolling at MCTI

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

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

PROGRAMS OF STUDY

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

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

How SOAR high school programs are accepted at postsecondary schools:

CollegeTransfer.net – Transfer Center

Aspire | Assess | Articulate

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

SOAR
Students Occupationally and Academically Ready

Monroe Career & Technical Institute - 194 Laurel Lake Road, Bartonsville, PA 18321 ● (570) 629.2001
www.monroecti.org

TECH PREP

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

Career & Technical Student Organizations

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

American Welding Society – AWS

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

DECA – An Association of Marketing Students

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

National FFA Organization (Agricultural Education)

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

Health Occupations Students of America – HOSA

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

NAHB – National Association of Home Builders

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

National Technical Honor Society – NTHS

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

SkillsUSA

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

Student Government/Interact

Student Government provides opportunities for active participation in the organization and management of school affairs; to further interest in all school activities; to teach and develop leadership qualities through domestic practices and to cooperate in promoting career and technical education in general, as well as the general welfare of the school.

Interact: A Rotary-sponsored service club for young people in their secondary-school ages, gives an opportunity for students to participate in fun and meaningful service projects. Interact clubs perform at least two projects a year, with one serving the community and the other furthering international understanding. Along the way, Interactors (Interact Club Members) develop their leadership skills and initiative while meeting new friends.

Through the service activities, Interactors learn the importance of:

- Developing leadership skills and personal integrity.
- Demonstrating helpfulness and respect for others.
- Understanding the value of individual responsibility and hard work.
- Advancing international understanding and goodwill.

Membership in the Student Government/Interact requirements:

- Each program session selects one representative and an alternate.
- Each representative and alternate is a bona fide member of a CTSO.
- Each representative (or alternate) attends meetings as called by the advisor.

AEVIDUM

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

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AUTO COLLISION AND REPAIR

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

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

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

CAREERS:

Automotive Body and Related Repairers
Automotive Glass Installers and Repairers
Painters, Transportation Equipment

Certifications available to qualified students:

Industry Certification	**Provider Name**
S/P2	S/P2
I-CAR, various levels	I-CAR

AUTOMOTIVE TECHNOLOGY

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

Students enrolled in the Automotive Technology Program are prepared to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This Program includes instruction in the diagnosis and testing, including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems and drive train and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, drive trains, fuel system components and air conditioning and includes the use of technical repair information and the state inspection procedures. The Program consists of a list of PDE required tasks and additional local or value added tasks.

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

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

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

CAREERS:

Electronic Equipment Installers and Repairers, Motor Vehicles
Automotive Service Technicians & Mechanics

Certifications available to qualified students:

Industry Certification	**Provider Name**
Certified Safety Inspector, Cat I	Pennsylvania Department of Transportation
S/P2	S/P2
Section 609 Certification for Refrigerant Recycling and Recovery	Mobile Air Conditioning Society Worldwide
ASE	Automotive Service Excellence
Battery Starting and Changing System	AC Delco
Electrical State 1 & 2	AC Delco
AYES Certificate	Automotive Youth Educational Systems
Motor Oil Certification	Valvoline

CARPENTRY

46.0201 CARPENTRY/CARPENTER
(PDE APPROVED PROGRAM OF STUDY)

The Carpentry Program is an instructional program that prepares individuals to apply technical knowledge and skills to lay out, fabricate, erect, install and repair structures and fixtures using hand and power tools. This Program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. The Program is designed to provide students with a combination of classroom theory and hands-on building experience in residential, commercial, and industrial construction trades. The Program consists of a list of PDE required tasks and additional local or value added tasks.

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

CAREERS:

Carpenters
Helpers--Carpenters

Certifications available to qualified students:

Industry Certification	Provider Name
CareerSafe/OSHA	Texas Engineering Extension Service
Pennsylvania Builders Association Skills Certificate	Pennsylvania Builders Association
Articulated Ladder	American Ladder Institute
Mobile Ladder	American Ladder Institute
Single and Extension Ladder	American Ladder Institute
Step Ladder	American Ladder Institute

COMPUTER NETWORKING and SECURITY

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

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

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

Specialized Equipment:	**Related Occupations/Employment Opportunities:**	**Personal Qualifications:**
Personal Computers Scanners Digital Cameras Data Projectors Servers Routers Firewalls Printers Network Sniffers	Network & Computer Systems Administrator Computer Security Specialist Computer Support Specialist Computer Security	Problem Solving Trouble Shooting Skills Manual Dexterity Analytical Skills Communication Skills Mechanical Aptitude

CAREERS:

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

Certifications available to qualified students:

Industry Certification	Provider Name
A+	Computing Technology Industry Association
Network+	Computing Technology Industry Association
Security+	Computing Technology Industry Association
Cisco Certified Network Associate (CCNA)	Cisco Systems
Network Cabling Specialist – Copper	C-TECH
A+ PC Pro	LabSim, Test Out
Network+ Pro	LabSim, Test Out
Security + Pro	Lab Sim, Test Out

COSMETOLOGY

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

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

Based upon hours of instruction needed, we can only accept new 9th and 10th grade students.

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
For participation in the program, students are required to purchase a kit with the items mandated by the State Board of Cosmetology and MCTI. Students are also required to purchase a uniform selected by MCTI.	Manicurist Hairdresser Hairstylist Manager Skin Care Specialist	Ability to Work Independently and in a Team Problem Solving Analytical Skills Creativity Patience Endurance

CAREERS:

Career/Technical Education Teachers, Secondary School
Hairdressers, Hairstylists and Cosmetologists

Certification available to qualified students:

Industry Certification	**Provider Name**
Cosmetologist	Pennsylvania Department of State, State Board of Cosmetology

CRIMINAL JUSTICE

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

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

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

CAREERS:

Bailiffs
Correctional Officers & Jailers
Detectives and Criminal Investigators
Police & Sheriff's Patrol Officers
Private Detectives and Investigators

Certifications available to qualified students:

Industry Certification	**Provider Name**
Certificate of Training - Recognition and Identification of Hazardous Materials (HAZMAT)	Pennsylvania State Fire Academy
First Aid	American Red Cross
Adult CPR	American Red Cross
AED Essentials	American Red Cross
Certified Protection Officer, CPO	International Foundation for Protection Officers

CULINARY ARTS

12.0508 INSTITUTIONAL FOOD WORKERS

(PDE APPROVED PROGRAM OF STUDY)

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

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

CAREERS:

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

Certifications available to qualified students:

Industry Certification	**Provider Name**
Certified Junior Culinarian (CJC)	American Culinary Federation
Pennsylvania Food Employee Certification (ServSafe, etc.)	Pennsylvania Department of Agriculture
ProStart National Certificate of Achievement	Pennsylvania Restaurant & Lodging Association (PRLA)

Adult CPR	American Red Cross
AED Essentials	American Red Cross
CareerSafe/OSHA	Texas Engineering Extension Service

DIESEL TECHNOLOGY

47.0613 MEDIUM/HEAVY VEHICLE AND TRUCK TECHNOLOGY/TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)

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

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

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

CAREERS:

Bus & Truck Mechanics & Diesel Engine Specialists
Farm Equipment Mechanics & Service Technicians
Mobile Heavy Equipment Mechanics

Certifications available to qualified students:

Industry Certification	**Provider Name**
AYES Certificate	Automotive Youth Educational Systems
Certified Safety Inspector, Cat I	Pennsylvania Department of Transportation
S/P2	S/P2
Section 609 Certification for Refrigerant Recycling and Recovery	Mobile Air Conditioning Society Worldwide

DIVERSIFIED OCCUPATIONS

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

The Diversified Occupations Program (DO) is a one-year instructional program for seniors that operates as an integral part of vocational education to provide a cooperative arrangement between the school and employers whereby the student receives general education instruction in the school and on-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 DO Program is a partnership between MCTI, the sending district, the student and the student's parents, and the employer. This training program is designed to help the student to transition from school to the world of work while gaining valuable life and work experience. Students are responsible for finding part-time employment with a local employer which is directly related to the career field they wish to pursue after graduating from high school. This Program is conducted at the student's district high school campus.

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

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

Certification available to qualified students:

Industry Certification	**Provider Name**
CareerSafe/OSHA	Texas Engineering Extension Service

DRAFTING & DESIGN TECHNOLOGY

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

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

Students who successfully complete the Program will have the opportunity to work as entry level 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.

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

CAREERS:

Architectural and Civil Drafters
Mechanical Drafters
Drafters, All Others

Certification available to qualified students:

Industry Certification	**Provider Name**
Autodesk Certified User	Autodesk

ELECTRICAL TECHNOLOGY

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

The Electrical Technology Program is an instructional program that prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program. The Program consists of a list of PDE required tasks and additional local or value added tasks.

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

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
Basic and Advanced Electrical Trainers Conduit Bending Equipment Power Wire Pullers Smart House Technology Trainers Analog and Digital Testing Equipment Motor Control Trainers PLC Trainers	Electrician Helper Electrician, Apprentice First Line Supervisor and Manager Electric Motor and Switch Assembler and Repairer	Mechanical Aptitude Problem Solving Skills & Troubleshooting Skills Analytic Skills Ability to Work Independently and in a Team Ability to work in all Weather and heights Communication Skills Knowledge of Algebra

CAREERS:

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

Certifications available to qualified students:

Industry Certification	**Provider Name**
CareerSafe/OSHA	Texas Engineering Extension Service
Pennsylvania Builders Association Skills Certificate	Pennsylvania Builders Association

ELECTRONICS TECHNOLOGY

15.0303 ELECTRICAL, ELECTRONIC AND COMMUNICATIONS ENGINEERING TECHNOLOGY / TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)

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

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
Oscilloscope Function Generator Power Supplies Logic Probes Multimeters	Production Repairer Electronic Assembler Electronic Technician Communication Technician Electronic Engineer	Communication Skills Analytical Skills Manual Dexterity Trouble Shooting Skills

CAREERS:

Electrical and Electronic Drafters
Electrical and Electronic Engineering Technicians
Electro-Mechanical Technicians

Certifications available to qualified students:

Industry Certification	**Provider Name**
Student Electronics Technician (SET)	Electronics Technicians Association, Int.
EM1 – DC Basics	Electronics Technicians Association, Int.
EM2 – AC Basics	Electronics Technicians Association, Int.
EM 3 – Analog	Electronics Technicians Association, Int.
EM 4 – Digital Basics	Electronics Technicians Association, Int.

EM5 – Comprehensive	Electronics Technicians Association, Int.

GRAPHIC COMMUNICATIONS

10.0399 GRAPHIC COMMUNICATIONS, OTHER

(PDE APPROVED PROGRAM OF STUDY)

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

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

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

CAREERS:

Commercial and Industrial Designers
Graphic Designers
Desktop Publishers
Prepress Technicians and Workers
Printing Press Operators
Etchers and Engravers

Certification available to qualified students:

Industry Certification	**Provider Name**
Adobe Certified Associate-Graphic Design & Illustration	Certiport

HEALTH PROFESSIONS

51.9999 HEALTH CARE TECHNOLOGY
(PDE APPROVED PROGRAM OF STUDY)

The Health Professions Program is designed to prepare individuals to apply knowledge and skills in the health occupations. This program is offered to grades 10-12 only. Instruction is provided in the basic skills in a variety of areas associated with health occupations such as health and medical services, pharmaceutical and medical instruments and supplies. Instruction includes, but is not limited to, foundations of health (medical terminology); anatomy and physiology; legal, ethical and economic aspects of health care; clinical laboratory procedures; basic health occupational skills; aseptic techniques; OSHA regulations; and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

Leadership is an integral part of the entire program through participation in HOSA (Health Science Technology Student Organization). A mandatory clinical assignment is integrated into the curriculum. Seniors take the Nurse Aide course and certification test. The Program consists of a list of PDE required tasks and additional local or value added tasks.

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
Datascope Pulse Oximeter Computer and Software Dental Operatory Operational Patient Units Stretcher Rehabilitation Equipment Mechanical Lifts CPR Mannequins Wheelchairs	Nursing Aide Home Health Aide Nurse Physical Therapist Medical Physician	Dependable Problem Solving Skills Excellent Communication Skills Able to Work Independently and in a Team Critical Thinking Skills

CAREERS:

Health Technologists and Technicians, All Other
Healthcare Practitioners and Technical Workers, All Other
Nursing Assistants

Certifications available to qualified students:

Industry Certification	**Provider Name**
BLS Healthcare Provider	American Heart Association
Heartsaver AED	American Heart Association
First Aid	American Red Cross
Nurse Aide Registry	Pennsylvania Department of Health
Personal Care Home Direct Care Staff Certificate	Pennsylvania Department of Public Welfare

HORTICULTURE (Floriculture & Landscaping)

01.0601 APPLIED HORTICULTURE/HORTICULTURAL OPERATIONS, GENERAL

(PDE APPROVED PROGRAM OF STUDY)

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

Specialized Equipment:	**Related Occupations/Employment Opportunities:**	**Personal Qualifications:**
Mowers Skid Steer Tractor String Trimmer Computers Tillers	Landscape Architect Landscaping and Grounds Keeping Agricultural Worker Nursery and Greenhouse Workers	Ability to Work Independently and in a Team Problem Solving Artistic Ability Analytical Skills Communication Skills

CAREERS:

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

Certifications available to qualified students:

Industry Certification	**Provider Name**
National Safe Tractor and Machinery Operator	Hazardous Occupations and Safety Training in Agriculture (HOSTA)
Certified Landscape Technician (CLT)	Pennsylvania Landscape & Nursery Association
Pennsylvania Certified Horticulturist (PCH)	Pennsylvania Landscape & Nursery Association
CareerSafe/OSHA	Texas Engineering Extension Service
Worker Protection Standard Training Certification for Greenhouse Workers and Handlers	US Environmental Protection Agency Region III

HOTEL, RESORT & TOURISM MANAGEMENT

52.1905 TOURISM AND TRAVEL SERVICES MARKETING OPERATIONS

(PDE APPROVED TECH PREP PROGRAM)

The Hotel, Resort & Tourism Management Program (HTMP) is an instructional program that prepares individuals to perform marketing and management functions in operational responsibilities associated with a wide variety of careers within the hospitality and tourism industries. Students will be instructed in the areas of personal development, communications, leadership, guest services, sales, financial processes, front office operations, housekeeping, food and beverage service, facilities management, property safety/security, resort management and other occupational preparation activities that will develop the student in the necessary competencies for employment in the hospitality and tourism industry.

The Program has been designed by the American Hotel & Lodging Association – Educational Institute with active industry involvement and approval. Through HTMP, partnerships are established with local hotels to provide student internships, field trips, and job shadowing.

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
Computers	Lodging Manager Sales Manager Food and Beverage Manager Housekeeping Supervisor Marketing Manager Guest Services Clerk Sales Representative	Excellent Communication Skills Decision Making Skills Problem Solving Skills Pleasant Personality Ability to Work Independently and in a Team

CAREERS:

Advertising and Promotion Managers
Marketing Managers
Sales Managers
Food Service Managers
First-line Supervisors of Housekeeping & Janitorial Workers
Sales Representatives
Customer Service Representatives
Hotel, Motel & Resort Desk Clerks

Certifications available to qualified students:

Industry Certification	**Provider Name**
Certified Rooms Division Specialist (CRDS)	American Hotel and Lodging Educational Institute
ServSafe/Manager Food Safety Certification	National Restaurant Association

HEATING, VENTILATION & AIR CONDITIONING

47.0201 HEATING, AIR CONDITIONING, VENTILATION AND REFRIGERATION MAINTENANCE TECHNOLOGY/TECHNICIAN

(PDE APPROVED PROGRAM OF STUDY)

The Heating, Ventilation & Air Conditioning (HVAC) Program is an instructional program that combines classroom and practical learning experiences. This Program prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions; overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems. This Program is certified by the National Center for Construction Education and Research. The Program consists of a list of PDE required tasks and additional local or value added tasks.

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

CAREERS:

Heating, Air Conditioning, & Refrigeration Mechanics & Installers

Certification available to qualified students:

Industry Certification	**Provider Name**
CareerSafe/OSHA	Texas Engineering Extension Service
EPA 608 Certification	Air Conditioning, Heating & Refrigeration Institute
Pennsylvania Builders Association Skills Certificate	Pennsylvania Builders Association

MARKETING

52.1801 SALES, DISTRIBUTION AND MARKETING OPERATIONS, GENERAL
(PDE APPROVED PROGRAM OF STUDY)

The Marketing Program is an instructional program that provides instruction in the fields of sales, distribution and marketing operations and focuses on the process and techniques of direct wholesale and retail buying and selling operations. This Program is concerned with marketing, sales, distribution, merchandising and management including ownership and management of enterprises engaged in marketing. Marketing education programs prepare individuals to perform one or more marketing functions such as selling, pricing, promotion, product/service management, distribution, financing and marketing information management. In addition, instructional programs include varying emphasis on technical knowledge of products and/or services marketed; related communication, economic, technological and computation skills; and abilities and attitudes associated with human relations. The Program may also include management functions associated with owning and operating a business. Sales, distribution and marketing operations prepares individuals for occupations in such businesses as retail and wholesale trade, finance, insurance, real estate, entertainment, hospitality, food service, communications, storage and distribution. The Program consists of a list of PDE required tasks and additional local or value added tasks.

This Program does not include warehousing/logistics functions.

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

CAREERS:

General & Operations Managers (Entrepreneurship)
Advertising & Promotions Managers
Marketing Managers
Sales Managers
First-Line Supervisors of Retail Sales Workers
Retail Salespersons
Advertising Sales Agent
Sales Representative, Other Services
Sales Representatives
Customer Service Representatives

Certifications available to qualified students:

Industry Certification	**Provider Name**
A*S*K Certification	A*S*K Institute
National Professional Certification in Customer Service	National Retail Federation Foundation

MASONRY

46.0101 MASON/MASONRY

(PDE APPROVED PROGRAM OF STUDY)

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

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

CAREERS:

Brickmasons and Blockmasons
Stonemasons
Tile and Marble Setters
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters

Certifications available to qualified students:

Industry Certification	**Provider Name**
CareerSafe/OSHA	Texas Engineering Extension Service
Pennsylvania Builders Association Skills Certificate	Pennsylvania Builders Association

OUTDOOR POWER EQUIPMENT TECHNOLOGY

47.0699 VEHICLE MAINTENANCE AND REPAIR TECHNOLOGIES, OTHER
(PDE APPROVED PROGRAM OF STUDY)

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

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
Drill Press Band Saw Jaw Table Vise Bench Grinders Mower Blade Balancer/Sharpener Hydraulic Press Grinding Machine Power Hone Boring Bar	Engine Repairer Service Gas-Engine Repairer Power-Saw Mechanic Small-Engine Mechanic	Handling and Moving Objects Making Decisions and Solving problems Standing Analytical Thinking Self-Control Mathematically inclined Able to interpret technical manuals

CAREERS:

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

Certifications available to qualified students:

Industry Certification	**Provider Name**
Outdoor Power Equipment Technician Certification	Equipment & Engine Training Council

S/P2	S/P2

PLUMBING TECHNOLOGY

46.0503 PLUMBING TECHNOLOGY/PLUMBER

(PDE APPROVED PROGRAM OF STUDY)

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

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

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

CAREERS:

Plumbers, Pipefitters, & Steamfitters
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters

Certification available to qualified students:

Industry Certification	**Provider Name**
CareerSafe/OSHA	Texas Engineering Extension Service
EPA 608 Certification	Air Conditioning, Heating & Refrigeration Institute
Pennsylvania Builders Association Skills Certificate	Pennsylvania Builders Association

PRECISION MACHINING

48.0501 MACHINE TOOL TECHNOLOGY/MACHINIST

(PDE APPROVED PROGRAM OF STUDY)

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

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

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

CAREERS:

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

Certifications available to qualified students:

Industry Certification	**Provider Name**
NIMS Machining Level I	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I CNC milling	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I CNC turning	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Manual Milling	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Manual turning between centers	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Manual turning with chucking	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Manual Drill Press Operations	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Measurement, Materials and Safety	National Institute for Metalworking Skills, Inc.
NIMS Machining Level I Planning, Benchwork, Layout	National Institute for Metalworking Skills, Inc.

WELDING TECHNOLOGY

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

The Welding Technology Program is an instructional program that prepares individuals to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders; positioning and clamping; and welding standards established by the American Welding Society (AWS), American Society of Mechanical Engineers and American Bureau of Ships. The Program is certified by the American Welding Society. The Program consists of a list of PDE required tasks and additional local or value added tasks.

Specialized Equipment:	**Related Occupations /Employment Opportunities:**	**Personal Qualifications:**
SMAW, GMAW, GTAW, FCAW equipment Oxy-Acetylene, Plasma Cutting equipment All of the above is used with steel, stainless steel, and aluminum	Combination Welder Skilled production Welders and Laborers Engineering Technician	Mechanical Aptitude Manual Dexterity Patience Able to Work Independently Balance and Agility

CAREERS:

Welders, Cutters, Solderers, & Brazers
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders

Certification available to qualified students:

Industry Certification	**Provider Name**
American Welding Society Welding Certifications	American Welding Society